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WHITTIER STATE SCHOOL
FRED. C. NELLES, SUPERINTENDENT

JOURNAL OF DELINQUENCY, MONOGRAPH NO. 1

THE
INTELLIGENCE OF THE DELINQUENT BOY

BY

J. HAROLD WILLIAMS, PH. D.
Director of Research, Whittier State School

WHITTIER STATE SCHOOL, DEPARTMENT OF RESEARCH
WHITTIER, CALIFORNIA, JANUARY 1919

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PREFATORY NOTE

The opening of the department of research, in 1915, gave us our first opportunity to obtain by systematic inquiry the facts related to the causes and prevention of juvenile delinquency. Four years of research have resulted in immeasurable benefit to the state for carrying out its institution program. The establishment of Pacific Colony for the feeble-minded, the readjustment of methods of segregating and instructing the children of the State, and the development of sentiment toward the establishing of 24-hour vocational schools, have all been made easier of attainment by reason of the work of this department.

The present study deals with a phase of the work which we deem of primary importance. The factor of intelligence is of so much consequence that we now consider its measurement essential to the proper understanding of any case. The disadvantage under which others have labored when the information thus obtained was not available, becomes increasingly apparent. The variability of intelligence, the problem of mental deficiency, the relation of mental development to age, race, conduct, heredity, and environment, as presented in this monograph have been matters of much concern. We have been fortunate in having access to the findings and putting them into practical effect before they could be presented in published form.

The problem of the state is not one merely of caring for a few scattered cases, but of making of each case a bit of evidence for the scientific determination of the underlying cause of the problem it represents. In the compilation and interpretation of data obtained from large numbers of cases, studies of this kind return to the State many times their cost. It is planned to continue this work through the Journal of Delinquency and the supplementary publications.

The present administration of the School and the authorities in the state government are desirous of encouraging and advancing research work in this and the related fields of child-welfare.

Superintendent, FRED. C. NELLES
Whittier State School.

INTRODUCTION

This study began as a survey of a group of delinquents, in connection with the work of the Buckel Foundation of Stanford University, the writer acting with the cooperation of Professor Lewis M. Terman and Superintendent Fred. C. Nelles. The extension of the work has been made possible through the establishing at Whittier of the department of research, an outgrowth of the original survey.

Brief preliminary and supplementary reports have been published from Whittier State School, the Buckel Foundation laboratory, in the Journal of Criminal Law and Criminology, The Child (London) and the Journal of Delinquency.

The writer is indebted to Professors Terman, Cubberley, Kellogg, and Brown of Stanford University, for helpful suggestions and guidance; to the entire research staff of Whittier State School; and particularly to Superintendent Nelles, whose interest and cooperation made possible the publication of the Journal of Delinquency and this monograph.

War conditions, arising after the publication had begun, caused the delay in its appearance. The printing, folding and binding have been done entirely by boys at Whittier State School.

J. HAROLD WILLIAMS.

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THE INTELLIGENCE OF THE DELINQUENT BOY.

CHAPTER 1. METHODS AND GENERAL RESULTS.

Scope and limitations. The data here presented include individual and group studies of 470 boys and young men between the ages of 6 and 22 years, all of whom are delinquent within the legal meaning of the term, or in serious danger of becoming so. All cases under discussion may be classified as either (a) delinquent or (b) dependent, according to the definitions which will be given for those terms at appropriate places.

The greater part of the material has been obtained at Whittier State School, with which the writer is now connected. This is one of three state institutions in California for delinquents. The delinquent boys included who were not at the time enrolled in this School were examined at Juvenile Hall, the detention home of the Los Angeles County Juvenile Court; the detention home of the San Diego Juvenile Court; and the California George Junior Republic. All of the cases were examined by the writer.

Since the Binet-Simon Scale has been available for general use the testing of delinquent children has become a common procedure in many institutions and juvenile courts. The numerous statistical and descriptive studies resulting from these tests have thrown much light upon the problem of delinquency, and after many years of juvenile work based chiefly upon theories, we are now well started toward learning the causes of delinquency, and discovering ways in which it can be prevented. Not only has the important factor of intelligence been made more clearly understood in its relation to delinquency, but the very application of standardized tests and the following of scientific principles of measurement have disclosed the enormity of the yet unstudied problems of juvenile conduct.

Intelligence is a central factor in conduct around which many influencing and influenced factors revolve. It is impossible to study one of these without considering its relation to the others. Hence the related factors of heredity, social status, surroundings, age, race, schooling, physical development, etc., all of which were investigated as a check upon the psychological tests, are given a share of the space covered by this discussion.

At the same time the limitations of the study cannot be too strongly emphasized. It is not assumed that the problem of delinquency can be solved by determining the intelligence levels of any number of delinquent children, nor that such a problem, affecting both boys and girls, can be fully explained by an investigation based upon either sex alone. The delinquent girl presents a number of problems which are of minor consequence in the study of the conduct of boys. Immorality, for example, which plays such an important part in the delinquency of girls, occurs in relatively small proportions among boys. On the other hand, offenses against property, such as burglary, stealing, arson, etc., although seldom committed by girls, are among the most frequent for boys. The many points in common, however, in the conduct of all children, call for a careful consideration of the causes of delinquency in both sexes. Studies of the intelligence of delinquent girls bear witness that this factor is of as great importance for girls as we have found it to be for boys. Dr. Weidensall's ''Mentality of the Criminal Woman'', Dr. Bronner's ''Comparative Study of the Intelligence of Delinquent Girls'', and Dr. Healy's ''Individual Delinquent'' furnish illuminating comparative data.

Conditions of Work. It is often pointed out that the success of intelligence testing depends in no small measure upon securing satisfactory experimental conditions, and in following the test directions with sufficient care to make the results comparable with the standards upon which they are based. In the present investigation no effort has been spared that such conditions might be obtained. The tests were made in a quiet room set apart for that purpose. Interruptions were few and of little consequence. With a few exceptions the tests were made in the research laboratory at Whittier State School, in which particular care has been taken in providing the prerequisites for intelligence testing. Responses were recorded **verbatim** by the examiner's assistant in all but a very few cases in which it was necessary for the examiner to do his own recording. The verbatim record furnishes many advantages; the records may be re-scored without the necessity of trusting to memory, the checking up by two persons instead of one allows for errors due to the failure of either to catch a word or expression, and the completeness of the record makes possible a certain amount of qualitative analysis, which (although hazardous to attempt too much of it) is frequently useful in cases of extremely high or extremely low intelligence. In the vocabulary test, for example, the recorded definitions often show the several types of responses, and are decidedly superior to "plus" and "minus" marks which stand for nothing but a passing judgment as to whether the definition is "right" or "wrong". This is also true of the interpretation of fables, tests of finding similarity, and many other tests. It is often desirable and necessary to know not only whether or not a test is passed, but **just how well** or **how nearly** it was passed. The uncertainty of personal opinion, especially in view of the fact that all of the tests are subject to future changes in their standardization, is alone sufficient reason for the keeping of verbatim records.

Those who are experienced in the testing of intelligence realize the importance of the subject's willingness to be examined. It might seem—for the belief has often been expressed—that delinquent boys (especially the older ones) would not be willing to give the necessary co-operation. The experience incident to this study does not justify that belief. In the examination of these cases, only once was a boy found who was unwilling to respond. This was a Mexican boy who, a few days previously, had been returned to the State School for violating his privileges of parole. No further attempt was made to examine him, although undoubtedly he could have been persuaded later if his case had been of any importance. The other boys in the school have almost invariably shown a marked interest in the tests, and many have requested that they might be re-examined. This was also true of the tests in the detention homes. On the whole, it seems that delinquent boys may be examined as satisfactorily as ordinary public school children. The delinquents are often slower, however, in reacting, and more tact is necessary in view of differences of temperament and habit. The use of supplementary data greatly reduces the probability of errors due to unsatisfactory test conditions.

Equally important in work of this kind is the spirit of co-operation on the part of older persons who are in charge of the children. These conditions have also been highly favorable. Superintendents of institutions, instructors, juvenile court judges, and probation officers are, as a rule, interested in securing all possible information concerning their charges. It is recognized that these exceptional children, even when reasonably well understood, are often difficult to teach and direct. The present day conceptions of the care and treatment of delinquent children require a more thorough understanding of the underlying causes and contributing factors. It is agreed by all that the factor of intelligence is of great importance. This is borne out by the recent development of clinical psychology and research in connection with juvenile courts and institutions.

Much care has been devoted to the scoring of the records. The verbatim recording of responses has been especially helpful in securing uniformity and accuracy in evaluating the test results and in calculating the intelligence levels. The procedure resulting from the standardization of the tests in the Stanford Revision of the Binet-Simon Scale has been followed exactly. Time has been given to details which might seem to be of minor importance, but the minimizing of errors of every kind is deemed of first importance in a comparative study of this kind. In the use of alternative tests and in dealing with irregularities of all kinds the procedure upon which the standardization is based was given precedence over personal judgment. Even with such caution, however, minor errors may have crept in.

Reliability of the measurements. The value of a set of intelligence measurements depends chiefly upon (a) what is meant by **intelligence,** and (b) the accuracy with which it has been measured. Without presuming to settle either of these points with any degree of finality, it will doubtless lead to a better understanding of the data here presented if the writer's conception of intelligence is made clear.

Whatever psychological factors mav be involved in the content and exercise of intelligence, and whether those factors are developed by natural means or by external influences, it is generally agreed that to be intelligent, an individual must be capable of meeting the ordinary problems of life with a reasonable degree of efficiency; he must be able to ''manage himself and his affairs with ordinary prudence''; he must be capable of competing with his fellow beings on approximately equal terms; insofar, at least, as this management and competition depends upon the use of his mental powers. There are, of course, all degrees of such management and competition. Some persons are obviously capable of unusual attainment in social and industrial competition. It is reasonable to consider such persons to be of **superior** intelligence. In the case of other persons, the best efforts result in a degree of success which is so far below that of the average person that their chances of supplying the ordinary necessities of life for themselves and their families are extremely uncertain. Such persons are feeble in mental capacity, and the term **feeble-minded** is used to designate those who are extremely inferior to the average. Owing to the fact that individuals of all degrees of intelligence are found, ranging from extreme inferiority, or feeble-mindedness, to extreme superiority, the terms **borderline, dull-normal** and **average-normal** are used in this study to designate those whose intelligence levels fall between the two extremes.

The difficulties in the way of classifying a large number of individuals by using the foregoing designations will become apparent to anyone who will make the attempt. These difficulties are especially evident in the classification of persons who belong to the delinquent, criminal, or other unsocial classes. We cannot always be certain, for example, when an individual **does not** manage himself and his affairs with ordinary prudence, and **does not** compete satisfactorily with his fellows, that he **lacks the capacity** for doing so. With the opposite situation there is less danger of error. Persons cannot do what they do not have the capacity for doing. Hence we are certain, when an individual attains average or superior success, that he is of average or superior intelligence. The use of ''average-normal'' and ''superior'' are less likely to be unfair to the persons so classified than the term ''feeble-minded''. In all groups, however, there are cases in which the level of intelligence cannot be accurately judged by the degree of success in the ordinary walks of life. Even if social efficiency were an absolute index of the level of intelligence our judgments might often be at fault, since we have as yet no standardized method of making the necessary observations.

There is, however, another means of arriving at a highly reliable judgment as to the level of intelligence. This means is the Binet-Simon Intelligence Scale, by which intelligence is measured in terms of carefully ascertained standards for the general population. The use of an intelligence scale makes possible the comparison of individuals upon a scientific basis. The fallacies of ordinary observations, subject to errors of memory and hasty judgment, may be avoided.

It is hardly appropriate here to enter into a discussion of the problem of intelligence testing. In all probability the majority of the persons into whose hands this study will fall are already familiar with the Binet-Simon scale and with the several revisions and extensions which have been made in the course of its development. The practicability of the scale for determining the intelligence level, and its general reliability as applied to different social groups have been sufficiently well established. The data given in this study furnish additional evidence of the value of the scale, especially in the form known as the Stanford Revision. An excellent account of the history and development of this product of Binet's genius is given by Dr. Lewis M. Terman in his ''Measurement of Intelligence''. (54).

Briefly, the scale is a graded series of tests, success in which requires the exercise of intelligence. For the most part, they require simple mental operations. These operations are called into play by the presentation of new and unusually interesting situations, such as arranging a series of small blocks in order of weight; repeating numbers; finding the ''foolishness'' in absurd statements; copying simple designs from memory after a brief exposure; arranging blocks in a construction puzzle; repeating sentences of different lengths; putting together disarranged sentences; making sentences from given words; marking out the path which would be followed in finding a ball lost in a circular field; deducing the lesson intended to be taught by each of a number of fables, etc. The tests involve reasoning, memory, judgment, imagery, discrimination, association and comparison of ideas, ingenuity, and, in short, practically all mental functions which may be considered as making up the general level of intelligence. At the time of Binet's death, in 1911, the scale consisted of 54 tests arranged in order of difficulty, as judged by the age at which they could be passed by ordinary children between the ages of 3 and 15 years. The Stanford Revision and Extension, published in 1916, consists of 90 tests, or 36 more than were included in the series left by Binet. The tests have been somewhat rearranged by Dr. Terman and certain changes made following their standardization with American children. This revision follows the original scale in the use of the ''mental age'', allows for its calculation in years and months instead of whole years and fractions, has the added value of extension through the adult levels, and on the whole is more accurately standardized by reason of the larger number of cases used and a refinement of the procedure. Moreover, the Stanford Revision has the advantage at this time of being the latest available instrument, and its arrangement embodies the results of the more important investigations in intelligence testing up to the time of its publication.

Dr. Terman has pointed out that the success of the Binet scale is due to three characteristics of the method: (a) to the use of age standards, in which ''mental age'' has a definitive comparative value; (b) to the employment of tests involving the higher mental processes, including reasoning, judgment, ingenuity, etc., which are so necessary in meeting successfully the ordinary problems of life; and (c) to the fact that the scale undertakes to measure the **general level** of intelligence, rather than specific functions, abilities, or ''faculties''. Whether or not such separate traits exist, it is the **general level** of intelligence upon which individuals must ultimately be compared if we are to judge intelligence in relation to social and industrial fitness. Tests of thousands of children and adults have repeatedly shown that for practical purposes Binet's hypothesis is correct.

Mental age and its significance. It has been pointed out that one of the chief characteristics of the Binet method, and the one, perhaps, that has been of most importance in making the scale of practical value, is the use of **age standards.** It occurred to Binet that intelligence is a function of age, and that the mental development of the great mass of ordinary children is the best possible basis for

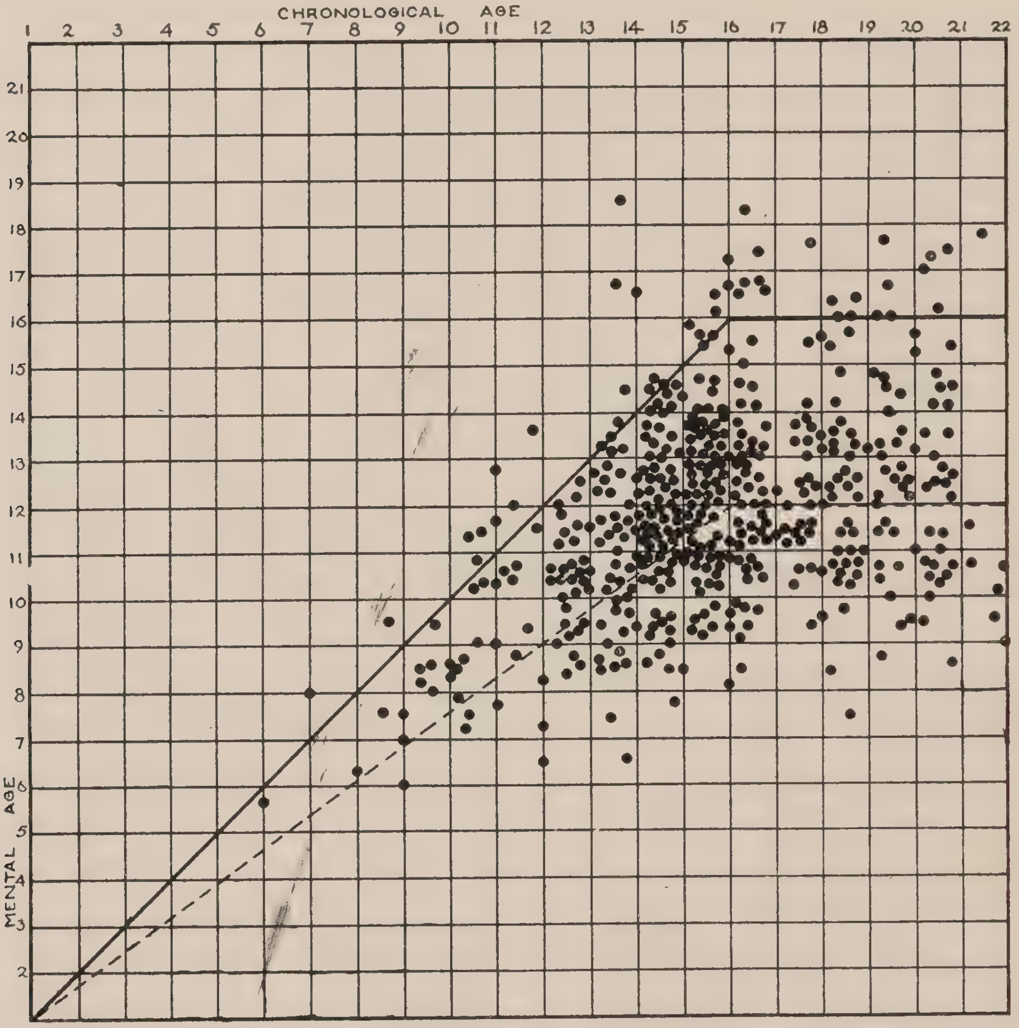

Fig. 1. Distribution of individual chronological and mental ages of 470 delinquent boys. Each dot represents one case. The heavy diagonal line represents absolute normality. Broken diagonal line represents retardation of 25 per cent.

measuring the deviations of those who were in any way different from the average. Hence the tests are arranged in such a way that most of a group of unselected children will succeed in just enough of them to make the **mental** age of each child the same as his actual age. An average child of 10 years will have a mental age of 10 years. An average child of 12½ years will have a mental age of 12½, etc. On the other hand, a child whose mental age differs from his chronological age may be said to be accelerated or retarded to approximately the extent of the difference. Our Case F-68[1], for example, was 9 years of age at the time the tests were given, and his mental age at that time was 6 years; a retardation of 3 years, which at his age is indicative of feeble-mindedness. Case S-12, at 14 years of age tested to the 16½ year level indicating that he is highly superior, intellectually, to ordinary children of his age. Cases N-29 to N-86 include those whose mental ages were approximately equal to their chronological ages, indicating that they are of average-normal intelligence.

For nearly all practical purposes, a child of a given mental age resembles, intellectually, an average-normal child of that age chronologically. For example, a child, or even an adult, whose mental age is 10 years, is capable of performing intellectual tasks which average 10 year-old children can do. Goddard (25) has pointed out that this is so universally true of the feeble-minded that their training may be based chiefly upon mental age. It is reasonable to expect that the level of intelligence expressed in terms of age standards will eventually become the foundation for all pedagogical and vocational training.

Mental ages of 470 delinquent boys. The results of the tests applied to all of the delinquent boys under discussion are shown in Fig. 1. Each dot represents one boy. The position of each dot on the horizontal lines reading from left to right represents the chronological age. The position of the dot with reference to the vertical lines represents the mental age, reading upward from the base line. The heavy diagonal line beginning at the lower left hand corner passes through the points at which the chronological and mental ages are exactly the same, up to the sixteen year level[2]. Cases which are exactly normal fall on this diagonal. Those which fall above or below the diagonal are accelerated or retarded respectively to the extent of the deviation. The dotted diagonal line is drawn so that at every point it lies just three-fourths of the way between the heavy diagonal and the base line. Dots placed on this line represent cases whose mental ages are just equal to three-fourths, or 75 per cent, of their chronological ages. The heavy diagonal represents the intelligence quotient of 1.00; the dotted diagonal represents the intelligence quotient of .75. Nearly all of the cases falling below the latter line are feeble-minded, as will be later explained.

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[1] Case numbers refer to cases arranged in order of intelligence quotients in Appendix Table I.

[2] The significance of the sixteen-year level will be discussed later.

It will be seen from this chart that the mental ages of these 470 delinquent boys fall, on the average, far short of reaching their chronological ages. While a number are approximately of normal intelligence, as may be judged from their proximity to the heavy diagonal, and while some are decidedly superior, the great majority fall between the two diagonals, indicating that the average mental age is something over three-fourths of what could be expected of a group of unselected children. In some cases the retardation is extreme; as, for example, in the case of the boy who is 12 years of age, and whose mental age is 6½. This is Case F-7, a boy who is known to be definitely feeble-minded.

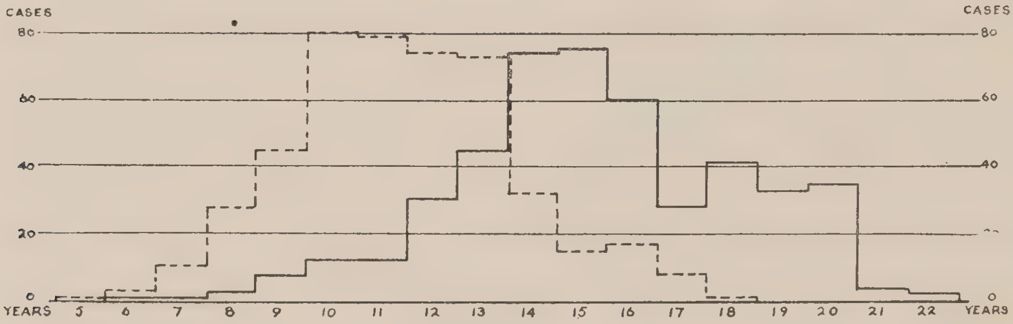

Fig. 2. Surface distribution of chronological ages (continuous line) and mental ages (broken line) showing overlapping.

The general relation between the chronological and mental ages is shown again in Fig. 2. Here the two are distributed separately, (ages expressed in round numbers) and the resulting distribution areas placed upon a common base line. Here it will be seen that the actual ages range from 6 to 22 years, with a median of 15. The mental ages range from 5 to 18 years, with a median of 11. Note that these areas overlap, but that the difference between the medians amounts to four years. The central tendency is for the intelligence of the group to be retarded to approximately that extent[3].

The significance of these mental age differences lies in the fact that while we have here a group of 470 boys and young men whose average age is 15 years, the native intellectual equipment of the group is so far inferior, that for practical purposes we must think of them as children of 11 years. Chronologically, 331 boys, or nearly 92 per cent, are over 12 years of age; mentally, only 222 boys, or 47 per cent, have reached the level of intelligence which is common to average children of 12 years. We can not understand these subjects or succeed in training them to become good citizens, if we overlook the fact that their reactions are very like those of a group of children who are much younger. For superior children, also, it is important that instruction and training be based upon mental age. The history of many of our brighter delinquent boys shows that the failure on the part of parents and teachers to recognize superior endowment and encourage its application has been closely related to later delinquent conduct. In cases in which neglect or oversight of this kind has occurred it becomes the duty of the industrial school to remedy, if possible, the resulting conditions. The basing of instruction and training upon intelligence levels should become the first step in correction or reform.

The intelligence quotient. Terman (54) and others have pointed out that mental age indicates only the general level to which the intelligence of the individual has developed at the time the tests are applied. The mental age of an average-normal child will increase year by year, remaining up to about sixteen years approximately the same as his chronological age. Even in feeble-minded children the mental age increases from year to year until the limit of development is reached. The mental age is not a measure of brightness. Our Cases F-106 and S-4 have exactly the same mental age (11 years 2 months), but it has required sixteen years for that level to be reached by F-106, while in S-4 it has been reached in approximately ten years. While it is correct to say that these two boys have the same intelligence level, it would be misleading to assume that such a statement is sufficient. F-106 is feeble-minded and S-4 is of superior intelligence. The former will probably never test appreciably higher than his present level, while the latter may have a mental age of 17 to 18 years when he has fully matured. The rate of development may be expressed by the **intelligence quotient** (I.Q.) which is the percentage ratio between the mental and chronological age of a given subject. The I.Q. of F-106 (11 years 2 months divided by 16 years) is .70, meaning that his mental age is 70 per cent of his chronological age. The I.Q. of S-4 (11 years 2 months divided by 10 years 2 months) is 1.10, meaning that his mental age is 10 per cent higher than his chronological age. The ages, mental ages, and I.Qs similarly calculated will be found in Appendix Table I for all of our 470 cases.

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[3] This is not strictly true, owing to the fact that the "average adult" level is based upon the mental age of 16 years.

Repeated tests of the same children at intervals of one to four years have indicated that the I.Q. of a given child remains practically constant between the ages of 10 and 16 years. Terman, Goddard, and Bobertag found that re-tested children had advanced at about the rate to be expected from the result of the first test. Dr. Terman's mixed group of normal, superior, dull and feeble-minded children, examined at intervals, were found to have I.Q.s approximately the same in all tests. The average difference between the first and second test was 4 per cent and the greatest difference only 8 per cent[4]. The writer's tests of delinquent and potentially delinquent boys have resulted in similar findings in regard to the stability of the intelligence quotient. The checking up of our cases during the past three years strongly supports Dr. Terman's contention that the I.Q. is the most practical and significant way in which intelligence may be expressed.

By reason of its relative stability the I.Q. becomes a reliable and useful index of intelligence. It is possible to predict within reasonable limits the probable level to which a given subject's intelligence will develop. We may expect that in most of our cases the I.Q. will remain constant or within a few per cent of the same figure throughout the developmental period. Our average-normal cases will in all probability remain normal; our feeble-minded cases are certain to be feeble-minded at maturity, and to remain so throughout life. The way in which predictions of this kind have been used will be discussed under "The social-intelligence groups".

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[4] ibid, p. 113.

Intelligence quotients of 470 delinquent boys. In Fig. 3 and Fig. 4 the I.Q.s for the entire group are shown. Fig. 3 shows the I.Q. of each case in its exact relation to all of the others, together with the social-intelligence group in which it belongs. It will be seen from the distribution that the I.Q.s of the 470 cases range from .47 to 1.35. This wide range of deviation is of great significance when it is considered that until a very few years ago the factor of intelligence differences was rarely taken into account in the training of delinquents, and in the "reform" which state institutions were expected to bring about. Yet this group (probably not differing greatly in this respect from the population of any other state industrial school) contains degrees of intellectual brightness ranging from imbecility on the one hand to superiority probably not exceeded in the general population by more than one child in a hundred.

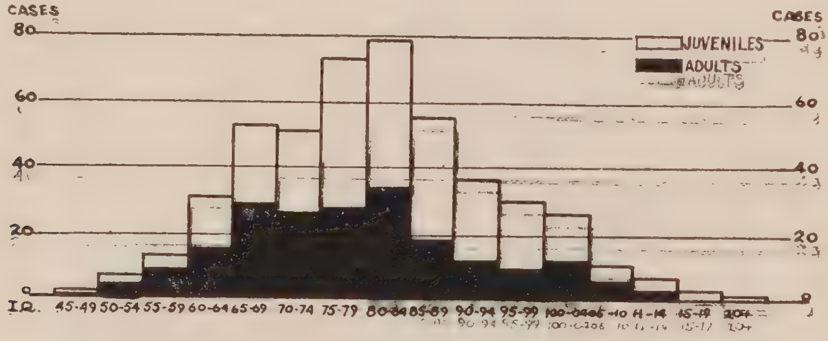

Fig. 4. General distribution of I. Q.'s by groups of five, for juvenile and adult cases.

At the time of this writing there has been occasion to retest 13 cases. In these the I.Q. has been found to be even less variable, on the whole, than Terman found in his "mixed group". The average difference in I.Q. between the first and second tests for our 13 cases is barely 3 per cent. If we omit one case (No. 9 in Table I) in which there is a high probability that the element of "coaching" may have affected the test, the average falls to 2 per cent, the highest differ-

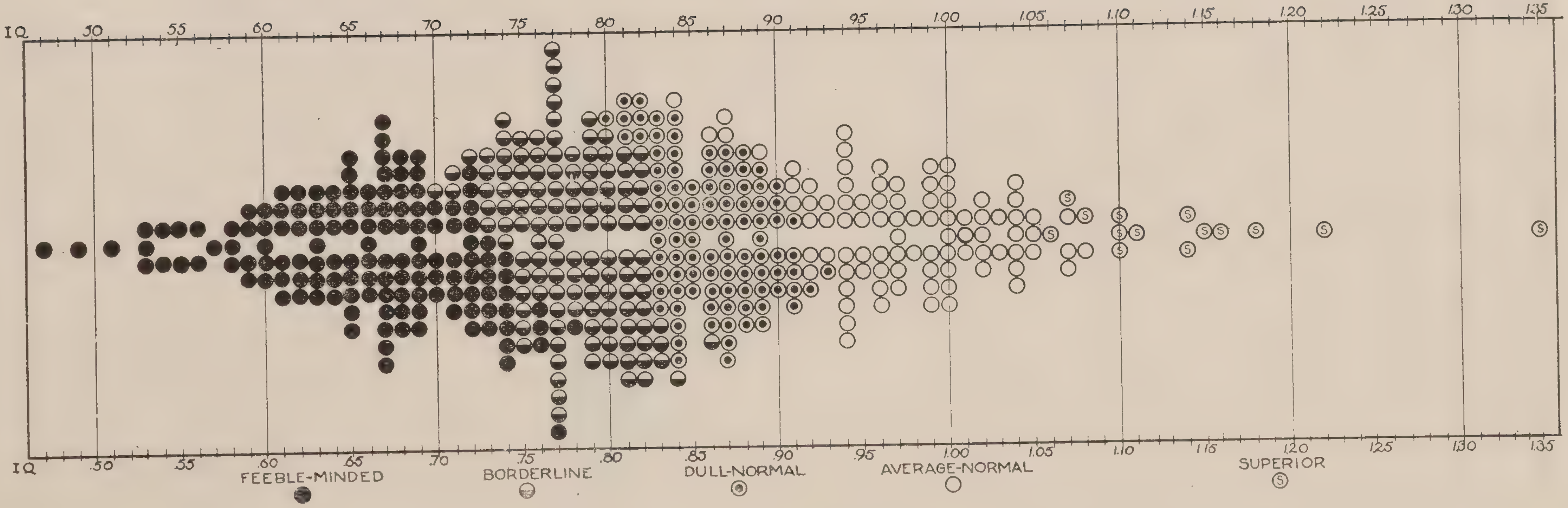

Fig. 3. Distribution of individual intelligence quotients by social-intelligence groups. Each circle represents one case.

ence being 4. The tests were made at intervals of one to three years[5]. The results are given in Table I.

The fact that the I.Q. tends to remain constant assists greatly in

TABLE I. RESULTS OF REPEATED TESTS OF DELINQUENT BOYS.

No.		Date of test		Age	M. Age	I. Q.	Difference
1	(a)	July	1914	13- 1	8- 8	.66	
	(b)	July	1915	14- 1	9- 6	.67	+ 1
2	(a)	July	1914	12- 2	8- 4	.68	
	(b)	July	1915	13- 2	9- 2	.69	+ 1
3	(a)	Dec.	1914	10- 4	7- 8	.74	
	(b)	June	1916	11-10	9- 2	.77	+ 3
4	(a)	July	1914	18- 2	10- 8	.67	
	(b)	July	1915	19- 2	11- 4	.71	+ 4
5	(a)	July	1914	14- 8	11- 4	.77	
	(b)	Aug.	1914	14- 9	11- 8	.79	
	(c)	July	1915	15- 8	11- 5	.73	— 4
6	(a)	April	1915	10- 0	8- 7	.86	
	(b)	June	1916	11- 1	9- 6	.86	0
7	(a)	Aug.	1914	10- 3	7- 8	.75	
	(b)	July	1915	11- 1	7-10	.72	— 3
8	(a)	July	1914	13- 7	10- 4	.76	
	(b)	July	1915	14- 7	10- 9	.74	— 2
9	(a)	July	1914	19- 9	11- 7	.73	
	(b)	July	1915	20- 9	13- 8	.86	+ 13
10	(a)	July	1914	12- 2	8- 4	.68	
	(b)	July	1915	13- 2	9- 2	.69	+ 1
11	(a)	July	1914	17-10	14- 3	.89	
	(b)	Nov.	1916	20- 2	14- 4	.90	+ 1
12	(a)	July	1915	14- 3	13- 7	.95	
	(b)	Jan.	1917	15- 8	14- 5	.93	— 2
13	(a)	Aug.	1914	14- 1	12- 2	.87	
	(b)	July	1915	15- 0	13- 6	.90	+ 3

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[5] A few details concerning some of the re-tested cases may be of interest. No. 4, during the time between the two tests, had been surgically treated for adenoids, tonsils, and seriously defective teeth. He was reported to have improved much in his general conduct and application. No. 5 tested somewhat higher in the second test, an occurrence which is quite common when so brief a time has elapsed (one month in this case). His mental age a year later was but one month higher than in the first test. It is doubtful if he will ever test above the twelve-year level. No. 9 crossed the continent twice during the intervening time and had much opportunity to enlarge his experience. His social and industrial reactions, however, together with the

the social-intelligence grouping which serves as a general guide in estimating the future possibilities of these delinquent boys. A recent study by Downey (18) agrees with our data on the stability of the I.Q.

The adult level. Before taking up the final classification it is necessary to consider the way in which intelligence is measured for adult cases, and how predictions are made which presuppose a level of intellectual maturity.

Tests of a number of adults known to be of ordinary intelligence, as judged by their social reactions and vocational success, have shown that there is little improvement after the mental age of 15 or 16 years by the Stanford Revision. The mental ages of an unselected group of normal adults tested by Dr. Terman were distributed between the 13 and 19 year levels. The great majority tested within twelve months of the 16 year level. Since this mental age seems to represent the level attained by the average man or woman, it has been designated the ''average adult'' level. An analysis of Dr. Terman's results showed that almost without exception those who tested much below the 16 year level were of inferior capability in social and industrial lines, while those who tested much above 16 were usually found to be the more successful and prosperous individuals. It is interesting to note that the scale was found as reliable for subjects who were almost entirely unschooled as for those who had had educational advantages; a point which is important in considering the intelligence of adult delinquents.

For practical purposes, then, we may disregard years above 16 in calculating the intelligence quotient. For all of our cases who had reached the age of 16 years the I.Q. was obtained upon the basis of mental age divided by 16. Referring to Appendix Table I it will be seen that this applies to many cases. F-1, for example, who is over 18 years if age, is 7½ years mentally. His I.Q. is .47 which is 7.5 divided by 16. Calculated on the basis of his actual age the I.Q. would

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fact that he had special opportunity for learning some of the tests, suggest that his intelligence is more fairly represented by the I.Q. first obtained. No. 11 also had special opportunity to enlarge his experience during the intervening two years, but the I.Q. has remained practically unchanged, as in the majority of the cases cited.

become .40, which is manifestly unfair, since we are not justified in considering his retardation from other than the level at which he could be considered intellectually equal to average adults. It will also be seen from the table that Cases B-21 to B-29, inclusive, although ranging in age from 15 years 10 months to 19 years 1 month, all test approximately 12 years, and hence the I.Q. in each case is .75. Persons over 16 years of age who test above that level may be considered above average, even if the mental age does not reach the chronological age. An example of this may be seen in case S-6, who is over 19 years of age and tests 17 years 7 months. His I.Q. is 1.10 because his mental age is 10 per cent above the 16 year level.

The fact that the 16 year level seems to be the average for ordinary adults suggests the use of that age in differentiating between juvenile and adult delinquents. For purposes of further comparison of results, all of our cases who are chronologically 16 years and over constitute the adult group. This includes 205 cases, the remaining 265 constituting the juvenile group. The I.Q. distribution for adults approximates that for the juveniles (Fig. 4), both ranging from below .50 to above 1.10. The slight difference between the medians (juvenile group .82, adult group .77) is probably due to selection. The younger group includes a number of court cases detained only for short periods, while the older group consists entirely of correctional institution cases. Moreover, the parole regulations of the State School require that unsuccessful boys return to the school. It would be reasonable to expect a lower average I.Q. among the older returned cases.

The social-intelligence groups. For convenience of discussion and comparative description, the cases have been divided into five groups, as follows: (a) feeble-minded; (b) borderline; (c) dull-normal; (d) average-normal; (e) superior. The classification is based upon the combined criteria furnished by intelligence tests and supplementary data, hence the designation "social-intelligence" groups.

The grouping of cases resulted from early attempts to differentiate between the feeble-minded and normal cases, and thus to determine the relation between feeble-mindedness and delinquency. The failure of any arbitrary standard to satisfactorily divide definite mental defect from absolute normality gave rise to the naming of an intermediate group, designated by most persons "borderline". This group was later divided, so that for our purposes there are two intermediate groups. The designation "superior" is used to classify individuals of higher than average intelligence.

Similar designations are used by Terman (54) who defines his groups (p. 79) in terms of the intelligence quotient, as follows:

Above 1.40	"Near" genius or genius.
1.20-1.40	Very superior intelligence.
1.10-1.20	Superior intelligence.
.90-1.10	Normal or average intelligence.
.80- .90	Dullness, rarely classifiable as feeble-mindedness.
.70- .80	Borderline deficiency, sometimes classifiable as dullness, often as feeble-mindedness.
Below .70	Definite feeble-mindedness.

The intelligence quotient limits of our groups:

Superior group	above 1.10
Average-Normal group	.93-1.10
Dull-Normal group	.83- .92
Borderline group	.75- .82
Feeble-minded group	Below .75

In neither case it is intended that these numerical limits are to be followed rigidly, or that the grouping may be determined at once in all cases by simply finding the intelligence quotient. Dr. Terman urges the extensive use of supplementary data and suggests repeatedly that intelligence tests alone do not constitute an infallible criterion for determining the social adaptability of a given individual. He does state, however, that the I.Q. is the most significant single criterion; and in this respect our findings accord with his.

The grouping for this study has been based upon four lines of investigation: (a) intelligence quotients; (b) individual observation, with special reference to vocational and social adaptability; (c) field data, including hereditary and environmental influences, personal history, etc.; and (d) medical examination, with special reference to factors which might handicap or retard normal development. Methods of obtaining and classifying the data included in (b) (c) and (d) are described under "supplementary data".

The following brief descriptions may serve to illustrate, in general, the kind of data upon which each classification is based:

The **feeble-minded** group includes all of those whose I.Q.s are below .70, and many others between .70 and .80. The average upper limit is about .75. It includes cases who, if adults, have not passed much beyond the 12 year level and who, if children, are of such low intelligence as to justify the conclusion that they are not likely to exceed that level. It includes those who are incapable of performing other than simple tasks, who need constant supervision in even routine work, and who are unable to plan for themselves. These cases have usually failed to make a living under ordinary conditions, have been unable to "compete on equal terms with their fellows", or to "manage themselves and their affairs with ordinary prudence". Few of this group pass beyond the fourth grade in school, and many are still in the primary grades when old enough chronologically to be in high school. The family history nearly always shows some mental deficiency, and feeble-mindedness in both parents is sufficient evidence to justify similar classification for the case under consideration.

Representative data for **borderline group**: I.Q. from .75 to .82. Probable limit of development, or level of maturity, 12 to 13 years; capable of routine tasks without close supervision, but little ability to plan. Usually of the "ne'er-do-well" kind, but not always absolute failures. Powers of abstract reasoning very low, hence limited to inferior work. Usually very slow in school, but seldom recognized as being on the borderline of mental deficiency. They barely escape social criteria for feeble-mindedness. Schooling seldom goes beyond the sixth grade. May have some feeble-minded relatives, and usually nearly all members of the family are either defective or "shiftless". Industrial instability is likely to characterize the family.

Representative data for **dull-normal** group: I.Q. from .83 to .92. Probable limit of development, 13 to 15 years. Not defective or feeble-minded according to any of the commonly accepted social criteria, but still not mentally equal to average persons of the same age and opportunity. Usually more successful in manual work than in anything else, and are capable of independent planning with reasonable efficiency. These persons do not often become leaders, but may be excellent workmen and may profit greatly from technical instruction. Will pass for average-normal in most localities and in nearly all industries, but are often considered ''slow'', ''dull'', ''not quick to catch on'', etc. Are usually a little retarded in school, especially when the higher grades are reached. May reach high school, but not many are likely to graduate. Relatives usually average-normal or dull-normal. Feeble-mindedness occasionally found in the family.

Representative data for **average-normal** group: I.Q. from .93 to 1.10. Development at maturity, 15 to 17 year level. Attain average success in nearly all forms of vocational endeavor, and often show special aptitude or have some special interest. Have ability to supervise others and to hold positions of responsibility. Can do independent thinking and planning. Personal history usually shows evidence of their having competed ''on equal terms'' with persons of average ability. Capable of regular promotion in school, provided illness, truancy, etc., do not prevent. Receive average marks in school work. Rarely have feeble-minded relatives, except through accident or disease. Members of the family successful and respected citizens. Some of superior attainments.

Representative data for **superior** group: I.Q. 1.10 or above. Development at maturity, about 17 year level. Have invariably shown superior adaptability to social and industrial conditions. Can direct others efficiently, and often rise from the ranks to become leaders in spite of environmental or physical handicaps. Nearly always show talent, and develop special interests. School progress superior. Promotion rapid, often skipping grades, rarely failing to pass. Make normal progress in high school and show capacity for higher training. Nearly all relatves are of at least average-normal intelligence and some decidedly superior, as evidenced by leadership, social status, wealth, official position, etc.

It should be borne in mind that the placing of an individual in one of these groups does not require the absolute agreement of data from all sources. School progress, for example, although usually a fair index of intelligence, is in some cases misleading. Cases of feeble-minded children reaching the eighth grade, and cases where children of superior intelligence have been held back in school because of arbitrary standards, age, or ''lock-step'' methods of promotion, soon teach one that such data must be used with extreme caution. Of all the data upon which intelligence may be judged, the results of the tests are by far the most reliable and uniform.

At the end of the intelligence examination each case is tentatively classified according to the I.Q. limits given in the preceding table. In all but a very few cases the supplementary data and this classification agree so closely that it would work little injustice if no modification were made. Where there is not full agreement there may still be some doubt as to the reliability of the supplementary data, which is sorely lacking in the standardized methods and procedure which intelligence tests have now attained. It is significant, however, that in most cases there has been a remarkably close agreement. This agreement may be seen in Fig. 3. Each circle on the chart represents one case. The position on the chart, horizontally, from left to right, represents the I.Q. Each circle is marked by one of the five symbols (explained on the chart) which refer to the intelligence groups. It will be seen at once that the different symbols cluster about a common level, the median for each social-intelligence group. Nearly all of the feeble-minded cases fall below .75, the upper limit used in the tentative classification. Nearly all the dull-normals fall between .83 and .92, which are the limits for tentative purposes in that group. Likewise, nearly all average-normals range within a few points of 1.00, the median for unselected children. Some of the deviations are the single borderline cases having an I.Q .of .70; the feeble-minded case having an I.Q. of .78; the borderline case at .86, and the average-normal case also with an I.Q. of .86; the dull-normal case at .80; and the superior case at 1.06. When we consider that intelligence tests are almost entirely a product of the present decade, and that our supplementary data have been gathered with the greatest possible care, the reliability of the Binet Scale in its present form for measuring social fitness must be considered very encouraging indeed. If we were to base our conclusions upon the tests alone, the reliability of the classification would still be higher than many Binet Scale advocates have expected, and much higher than all of our supplementary data combined.

Comparison of the intelligence levels of delinquent and non-delinquent children shows a decided superiority of the latter. Delinquent groups, wherever found, contain a much higher proportion of mental defectives than may be found among ordinary public-school children or in the general population. The same investigations show a proportionately smaller number of average-normal and superior children among delinquents. Comparing our group proportions with Terman's similar groupings of one thousand unselected children, we have the following table:

Groups	Our cases	Terman's 1000
Superior	14 boys, 3.0 per cent	20 per cent
Average-Normal	90 boys, 19.2 per cent	60 per cent
Dull-Normal	97 boys, 20.6 per cent	10 per cent
Borderline	128 boys, 27.2 per cent	8 per cent
Feeble-minded	141 boys, 30.0 per cent	2 per cent

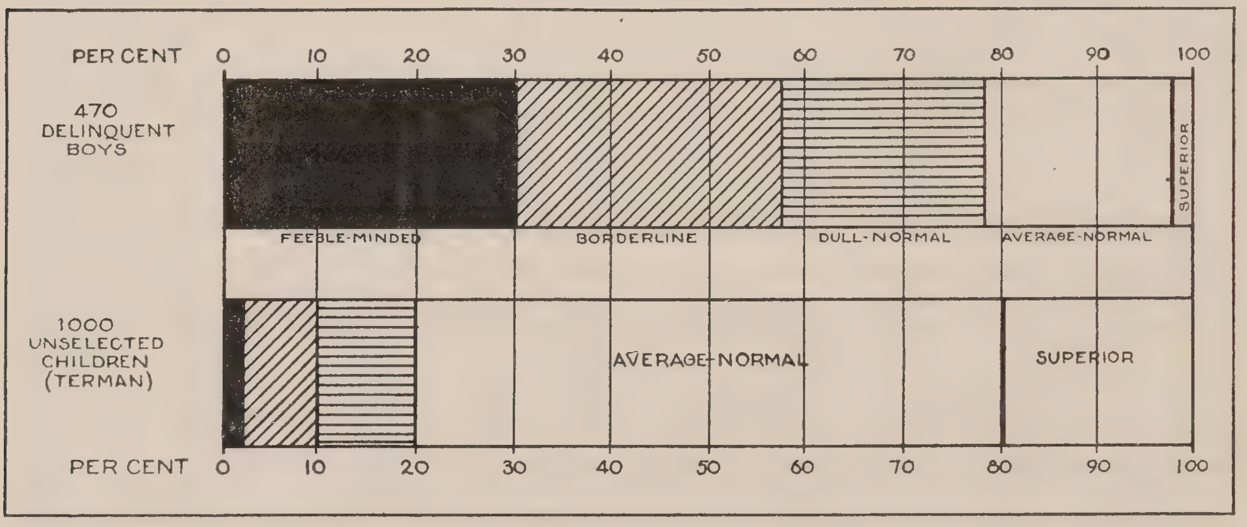

Fig. 5. Social-intelligence grouping of our cases in comparison with Terman's 1000 unselected school children.

In Fig. 5 this comparison is shown graphically. The black area representing definite feeble-mindedness extends in the delinquent group to fifteen times the black area representing feeble-mindedness in the unselected school children. This difference alone, when it is noted that the comparison is based upon essentially the same standards, is perhaps of greater significance than any other single result of this study. The relatively larger proportion of borderline and dull-normal cases in the delinquent group, together with the relatively smaller number of average-normal and superior cases, clearly indicates the social and intellectual inferiority of the group with which we are now dealing.

That the differences obtained are not due to age differences may be seen in Fig. 6. Here are distributed the 470 cases according to chronological age, with the relative extent of each social-intelligence group in every age represented. Feeble-mindedness is common to all of the age-groups and in not greatly varying proportions. The differences are not due to unfairness of the tests, inasmuch as the same tests, with exactly the same procedure, were used in making the comparison, and, moreover, the supplementary data have more than made up for the frequently alleged imperfections in the scale. Until better and more reliable methods are available for measuring intelligence and judging social adaptability we cannot escape the conviction that the differences here described represent actual differences in native endowment. How this conclusion is borne out by the study of

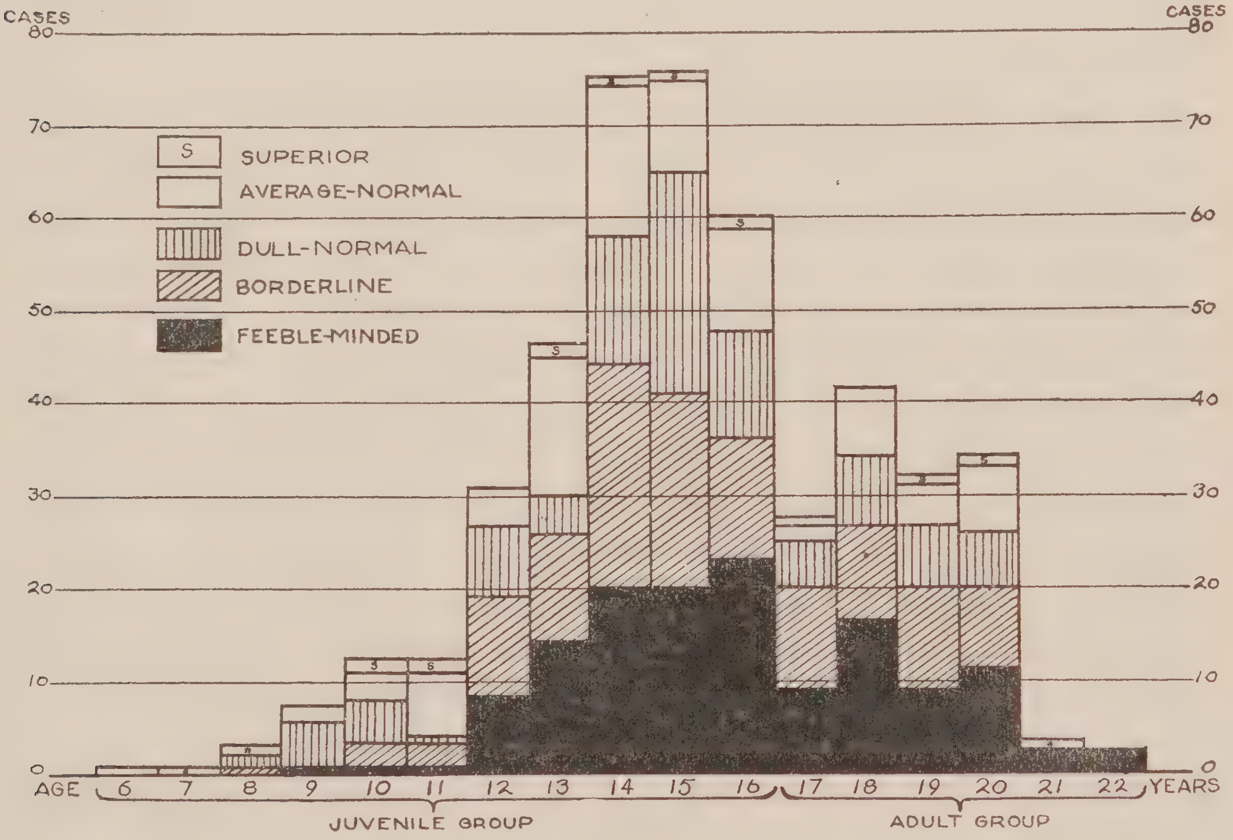

Fig. 6. Distribution of social-intelligence groups by chronological ages of subjects

family history, the analysis of conduct, the classification of environmental influences, and detailed investigations of individual cases will form the remaining part of the study.

The supplementary data. During the three years over which the tests have extended much time and attention have been given to the securing of data from other sources. Binet, Terman, Bobertag, Goddard, Kuhlmann and other advocates of the test method for measuring intelligence have emphasized the importance of interpreting the test results in terms which call for detailed information concerning the subject's personal history, heredity, physical condition, industrial efficiency, moral reactions, home conditions, and other factors related to the development and expression of intelligence. Terman (54, p. 50) says: ''Those who accept the (Binet) method as all-sufficient are as much in error as those who consider it no more important than any one of a dozen other approaches. Standardized tests have already become and will remain by far the most reliable single method for grading intelligence, but the results they furnish will always need to be interpreted in the light of supplementary information''.

This precaution is especially necessary in the study of the intelligence of delinquent and dependent children. Their very presence in a public institution is evidence that their social life has not been normal. They are exceptional children, and it logically follows that they are products of exceptional conditions. Whether these conditions are natural or acquired, hereditary or environmental, cannot be decided a priori. Unfortunately, this class of children has been too often dealt with and the causes of their condition argued from insufficient data. Feeble-minded children of drunken fathers have been assumed to be defective because of the father's drinking, or to the unfavorable home conditions with which his drinking is associated; the moral and intellectual superiority of non-delinquent over delinquent children has been attributed to unusual opportunities in the homes of the former, and to the poverty and disease often found in the homes of the latter. Many studies in delinquency have been seriously at fault because of the failure to use standardized tests of intelligence. the omission of data on heredity, and the insufficient classification of environmental conditions.

The supplementary data may be classified as follows: (I) personal history; (II) heredity; (III) early environmental factors; and (IV) individual observation. The greater part of the data has been gathered through the assistance of trained field workers, following the methods of the Eugenics Record Office. It is believed that the personal and family histories are as complete and reliable as any which have been used for similar purposes.

The personal history (I) consists of (a) chronological data, including data and place of birth, date of offenses, commitment, etc.; (b) delinquent conduct, including detailed accounts of offenses, conduct at home or school, and elsewhere, with record of court and probation treatment, previous commitments, etc.; (c) associates, inclinations and amusements; (d) school history and progress, general and specific ability and interests, deportment, etc.; (e) intelligence, information other than test results; opinions of parents, relatives, teachers, employers, etc.; (f) physical condition, including medical examination, health, developmental and disease history, physical defects, etc.; (g) vocational record; positions held, kind and tenure of employment, success, ability and preferences; (h) moral character, including general obedience and respect for others, habits, self control, religious connections, general responsibility for self and family; (i) temperament; general disposition, ability to get along with others; (j) home conditions, graded by Whittier Scale for Grading Home Conditions, with related information; (k) neighborhood conditions, graded by Whittier Scale for Grading Neighborhood Conditions, with related information.

Data on heredity (II) consist of a chart showing the genealogy of the **propositus** and his family extending through at least three and often more generations. Each chart is accompanied by a detailed written history, giving specific information concerning each individual represented on the chart, including the propositus. Especially important, and usually the most complete, is the information on the immediate family. So far as possible, the more significant characteristics of each individual are represented on the chart by symbols, to which Fig. 7 constitutes a key. Representative family charts are used in the discussion following this chapter. Cowdery (12) discusses the field work in delinquency in more detail.

Although delinquency in itself is probably not an inherited trait, the study of family history and the analysis of traits (Chapter IX) have disclosed extremely significant ways in which heredity is related to all forms of unsocial conduct. Feeble-mindedness occurs among delinquents in relatively large proportions; heredity is responsible for probably three-fourths of feeble-mindedness. Nomadism, or the wandering impulse, is the inherent cause of about half of our truancy, and hence is a factor in the production of delinquency. Insanity, epilepsy, excitability and other inherited traits are also related factors. To ignore the influence of heredity would be to overlook one of the most common sources of delinquency.

Environmental conditions (III) are studied through data on influences surrounding the propositus from early childhood. Home and neighborhood conditions are carefully classified and graded by the use of the scales to which reference has already been made. While the use of these scales (Chapter X) with individual score cards for each case gives a better idea of the home and neighborhood conditions than can be obtained in any other way, the items represented on these scales are by no means taken to represent all of the environmental influences worthy of consideration. Experience has shown, however, that the ‘‘home index’’ and ‘‘neighborhood index’’ often tell exactly what we wish to know with reference to surroundings. The use of numerical terms adds to the value of the data for comparative purposes. As a rule, each item is made a separate line of investigation and is carried beyond what is necessary to arrive at its grading value. The item ‘‘parental conditions’’, for example, is often worth separate and intensive study.

Observational data (IV) include (a) observations made during the examination, such as interest in the tests, general attitude, emotional stability, indications of moral traits, ability and quickness to meet new problems; etc.; (b) observations made during the period of vocational training while an inmate of an institution; (c) conduct and activities during parole, or while on temporary leave of absence from the institution, and (d) conduct, vocational success and general social and industrial adaptability after discharge.

The use of the supplementary data will be discussed especially in connection with the individual cases which are given as illustrative of the different social-intelligence groups. It will be observed that not always do the data agree in exact detail. Frequently the social and industrial reactions of a given individual have been superior to what might be expected of the level of intelligence indicated by the tests. In other cases the tests seem to have indicated a higher level than would have been estimated on the basis of the supplementary data alone. It is intended that an impartial view shall be taken with reference to data from all sources, and that the results will be interpreted in the light of their significance for practical purposes.

CHAPTER II. THE FEEBLE-MINDED GROUP.

(30 per cent of the 470 cases.)

The group as a whole. Our feeble-minded group contains 141 cases between the chronological ages of 9 and 22 years. The median age is 16 years. Adults (cases over 16 years of age) comprise 54 per cent of the group, and juveniles (cases under 16 years of age) 46 per cent. The I.Q.s range from .47 to .78. The median I.Q. is .67. Thus most cases are high grade morons, being very near the borderline. The distribution of I.Q.s in equal sub-groups of 25 per cent is given in the following table:

Highest quartile	.70 to .78
Third quartile	.67 to .70
Second quartile	.62 to .67
Lowest quartile	.47 to .62

The manner in which the individual cases are distributed by I.Q.'s may be best seen in Fig. 3.

Investigations of others. The extent to which delinquency and crime may be accounted for by feeble-mindedness has occupied a large share of attention during the past few years. General interest in the problem increased by leaps and bounds with the advent of the Binet scale, which was soon found to be an extremely valuable instrument for detecting feeble-mindedness. Tests given in many institutions revealed startling proportions of mental defectives among the delinquent and criminal classes. Unfortunately, in some instances too great accuracy was assumed for the scale in its early unfinished form, and enthusiasm for the test method resulted in the overlooking of valuable data from other sources, upon which intelligence judgments had entirely depended in the past. While the Binet scale undoubtedly furnishes the most reliable single method for detecting feeble-mindedness, it has been repeatedly pointed out by Binet and others that its use does not justify dispensing with supplementary data. On the other hand, some investigators still obsessed with the idea that intelligence is much too complicated to permit of its measurement by any simple series of tests, greatly underestimate the practical value of the test method. Still others, placing personal opinion above the objective results of standardization, so mutilated the scale by arbitrarily omitting certain tests, shifting tests to different years, modifying the procedure without experimental evidence that the changes were justified, and adding tests which had no significance whatever for the results they were seeking, that their results became of doubtful value.

Partly as a consequence of the different ways of using the scale, the proportion of feeble-mindedness among delinquents in institutions has been variously reported from 10 to 90 per cent. Obviously, it is not to be expected that even the same investigator using the same methods would find the proportion to be exactly the same in all groups of delinquents. The factors influencing the selection of institutional cases are shown by Crafts and Doll (14), and Kuhlmann (37) to be many, and of great importance. Wallin (50) thinks that most studies in the intelligence of delinquents have given proportions of feeble-minded far in excess of the actual facts. Institution and court regulations, legal definitions, race, nationality, age, sex and causal conditions are found to vary greatly in different localities. Where one institution may refuse cases known to be feeble-minded, another may be especially adapted to care for such cases. The inmates of one institution may come chiefly from the slums of a large city, while another may contain a less selected group. It will be pointed out in Chapter VIII that our 30 per cent of feeble-minded cases drops to less than 25 per cent if all but those of the white racial group are eliminated, while if our study were limited to delinquents of Mexican-Indian descent the proportion of feeble-minded would be more than one-half. At the same time, it is highly improbable that different state institutions for delinquent children contain proportions of feeble-minded varying as greatly as the different early investigations might lead one to believe. It is believed that in this study sufficient relative weght is accorded to test results and supplementary data to cause the proportion of feeble-minded to be fairly representative of the actual conditions, so far as our group of delinquents is concerned.

Following are given the salient points in some representative investigations. The results are summarized in Table II.

TABLE II. SUMMARY OF INVESTIGATIONS OF THE EXTENT OF FEEBLE-MINDEDNESS AMONG DELINQUENTS.

Year	Investigator—With Reference No.	No. of Cases	Sex of Cases	% F.M.	Tests Used	Institution
1912	Fernald, G. G. (20)	100	M.	25	Several	Massachusetts State Reformatory
1912	Goddard (27)	100	M.F.	66	Binet	Juvenile Court, Newark, N. J.
1912	Sullivan (53)	109	F.	33 ?	Binet	Hollway, England
1912	Morrow & Bridgman (41)	60	F.	66	Binet	Training School, Geneva, Ill.
1913	Dewson (30)	1186	M.F.	26	?	State Industrial School, Ohio
1913	Monkemoller (2)	134	M.F.	50	?	Home for Neglected Children, Berlin
1914	Bowers (5)	100	M.	23	?	Indiana State Prison
1914	Bronner (7)	505	M.F.	10	Binet*	Juvenile Court, Chicago
1914	Pintner (46)	100	M.F.	46	Binet	Juvenile Court, Columbus, Ohio
1914	Pyle (48)	240	F.	66	Several	Missouri Industrial Home
1914	Renz (49)	100	F.	58	Binet	Girls' Industrial Home, Ohio
1914	Spaulding (5)	400	F.	16.8	Binet & Others	Massachusetts State Reformatory
1915	Haines (28)	200	M.	68	Point Scale	State Industrial School, Ohio
			F.	58		
1915	Bluemel (3)	200	M.F.	32.5	Binet	Juvenile Court, Denver
1915	Rossy (50)	300	M.	22	Point Scale	State Prison, Massachusetts
1916	Fernald, G. M. (21)	135	F.	34	Binet	California School for Girls
1916	Ordahl (43)	53	M.	36	Binet	Joliet (Ill.) Penitentiary
1916	Ordahl (44)	341	M.	19.6	Binet	St. Charles (Ill.) School for Boys
1916	Allen (1)	583	M.	35.4	Binet	Preston School of Industry, Calif.
1916	Hauck & Sisson (31)	201	M.	24.6	Binet and Others	Idaho Industrial Training School
			F.	35.3		
1917	Fernald, M. R. (23)	100	F.	48	Binet	Bedford (N.Y.) Reform. for Women
1917	Ordahl (45)	53	M.F.	42	Binet	Juvenile Court, San Jose, California
1917	Haines (29)	100	M.	20	Point Scale	Ohio Penitentiary
		33	F.	30	Point Scale	Ohio Penitentiary
1917	Hickman (33)	678	M.	58	Binet	Indiana Boys' School
1917	Bowler (6)	75	F.	45	Binet	Ohio State Industrial School
1917	Faber & Ritter (19)	110	M.	30.9	Point Scale	Boys and Girls' Aid Society, San Francisco
1917	Kelley (35)	296	M.	20	Binet	Texas Training School
1918	Terman & Knollin (55)	155	M.	17.9	Binet	San Quentin (Cal.) Prison

*Dr. Bronner used the Binet tests only in doubtful cases.

Dr. G. G. Fernald (20) by the use of different tests with 100 prisoners at the Massachusetts State Reformatory at Concord, found that at least 25 per cent were so far below normal as to justify their classification as feeble-minded. This study was one of the earlier and more conservative estimates of the proportion of feeble-minded among delinquents. The tests used, however, had not been completely standardized.

Goddard (27) tested 100 unselected juvenile court cases at Newark, New Jersey, with the Binet-Simon scale in 1912. Using a mental retardation of four years as a basis, 66 per cent of the cases were found to be feeble-minded.

Sullivan (53) examined 109 female prisoners at Holloway Prison, England, using the Binet scale. He does not estimate the number of feeble-minded, but the results which he gives in detail for each case indicate that fully one-third could safely be so classed.

Morrow and Bridgman (41) examined 60 of the 500 inmates of the State Training School for Girls at Geneva, Illinois, using the Binet scale. They found 40 cases, or about 66 per cent, to be feeble-minded, judging by the criterion of four years' retardation. The cases reported upon may not have been entirely representative of the enrollment of the institution, and it is possible that had more been examined the proportion of feeble-minded would have been found to be less. The chronological ages of the group examined ranged from 9 to 20 years. The mental ages ranged from 5 years to the adult level (Goddard's 1911 Revision). The median chronological age was 14; the median mental age, 9. The authors report that in contrast to the previous uncertain methods of judging intelligence, the tests proved highly reliable and emphasized ''how little can be learned by mere observation, and how inaccurate a classification will be unless controlled by some definite standard by which each child is subjected to exactly the same tests.''

Hart (30) reports a study made by Miss Mary Dewson at the State Industrial School at Lancaster, Ohio, of 1186 delinquent girls, in which 333 cases, or 28 per cent, were found to be of ''subnormal intelligence''. Of the subnormal cases at least 20 per cent were so feeble-minded as to be strictly institution cases.

Aschaffenburg (2) cites a study of 134 children in the Berlin Home for Neglected Children, in which Monkemoller found 68 children, or approximately 50 per cent, feeble-minded.

Bowers (5) made a study of 100 recidivists in the Indiana State Prison in 1914. He reports 23 per cent feeble-minded, 10 per cent epileptic, and 17 per cent otherwise abnormal. The diagnoses were made upon the basis of indications of fitness for "the ordinary duties of life". The report is therefore conservative, since the social test was made the chief criterion. Intelligence tests would probably have revealed many additional feeble-minded who were doubtfully normal as judged by "indications" of social fitness.

Bronner (7) in a study of 505 offenders brought before the Chicago Juvenile Court who were "as little selected as is possible to obtain" found "the proportion of feeble-minded to be less than 10 per cent, while the group of those normal in ability exceeds 90 per cent". Dr. Bronner took extreme care not to exaggerate the proportion of feeble-minded, and it is probable that this may have led to an understatement. No examinations were given to children who showed no school retardation; who had completed the sixth grade, and who were pronounced "normal" by the physician, the probation officer, and the teacher.

Pintner (46) found a much higher proportion of feeble-minded among delinquents than did Dr. Bronner. Of 100 wards of the Columbus, Ohio, juvenile court, the Goddard 1911 revision of the Binet scale gave 46 per cent feeble-minded (retarded 3.1 years) 21 per cent "backward" (retarded 1.1 to 3 years) and 33 per cent normal (retarded less than 1 year.)

Pyle (48) made use of several mental and physical tests with 240 girls in the State Industrial Home at Chillicothe, Missouri. No attempt was made to measure the general level of intelligence, but the results of the tests given, compared with his standards for unselected girls, led him to conclude that "about two-thirds are subnormal. Most of them (the subnormal cases) are probably high-grade morons."

Renz (49) used the Binet tests in examining 100 cases selected at random at the Girls Industrial School in Ohio, and found 58 per cent feeble-minded, as judged by a mental retardation of four or more years. It will be noted that Miss Dewson (30) at the same institution, without tests, found relatively fewer feeble-minded cases.

Spaulding (51) reports a detailed study of 400 women offenders at the Massachusetts State Reformatory, South Framingham. A miscellaneous group of mental (including Binet tests), physical and psychiatrical tests resulted in a classification of cases according to both mental and physical fitness. Of the 400 cases, 16.8 per cent showed ''marked mental defect'', while 26.8 per cent in addition to these showed ''slight mental defect''. Probably the greater proportion of both groups (total 43.6 per cent) are feeble-minded in the social meaning of the term, since a further classification based upon observation of availability for institution work included in the ''incompetent'' group 40.3 per cent of the total number of inmates. These ''incompetents'' were found to be unable to manage themselves with the ordinary prudence required for even institutional work. Most of them, Dr. Spaulding states, should be in institutions for the feeble-minded.

Haines (28) applied the Yerkes-Bridges Point Scale to an equal number of boys and girls in the Industrial Schools of Ohio. Of 100 girls, 58 per cent were rated as morons; of 100 boys, 78 per cent were so classified.

Bluemel (3) gave Binet tests to 200 boys and girls in Judge Lindsey's court, Denver. He found 65 subjects, or 32.5 per cent, who were retarded mentally three or more years. Bluemel conservatively estimates the proportion of feeble-minded among his cases to be 26 per cent, after eliminating all of those testing 12 years or above.

Rossy (50) used the Yerkes-Bridges Point Scale in the examination of 300 cases at the Massachusetts State Prison. The test results were calculated for all cases in terms of points and also in years and months. Of the 300 prisoners studied, 22 per cent were found to be feeble-minded, and to be ''custodial cases, in so far as their deficient mentality and significant history indicate the need of supervision''. Use was made of family history and other supplementary data.

Dr. Grace M. Fernald (21) reports an investigation of 136 delinquents at the California School for Girls. Dr. Fernald carefully considered the validity of the Binet scale and numerous individual tests for measuring the intelligence of delinquent girls. In the interest of accuracy and safe conclusions, each test was scored according to four revisions: (a) Binet's 1911 revision; (b) Huey's revision; (c) the tentative Stanford Revision of 1914; and (d) the final (1916) Stanford Revision. Owing to the changes made at the upper end of the scale the different revisions gave slightly different but not significant, proportions of feeble-minded. The proportion was found to be 28 per cent by the Binet 1911 revision, and 26 per cent by the Stanford Revision, "feeble-mindedness" in the latter case being judged upon the basis of I.Q. .70 or below. After again revising the data in the light of supplementary information, including education, home conditions, emotional stability, etc. Dr. Fernald places the proportions as follows: feeble-minded (moron) 24 per cent; borderline, 12 per cent; normal and "low normal", 51 per cent; "unusual ability", 13 per cent. This proportion of feeble-minded (24 per cent) must be considered very conservative since Dr. Fernald states that 26 per cent tested .70 or below by the Stanford Revision. The individual case studies do not show how supplementary data were interpreted for cases testing between .70 and .80, some of whom must have been feeble-minded within the usual meaning of the term.

Ordahl (43) studied 53 adult male prisoners at the Joliet Penitentiary, using the tentative Stanford Revision of the Binet scale. The I.Q. distribution (his Table II, p. 2) shows that 19 of the prisoners tested at .70 or below, but only 14 were considered definitely feeble-minded, most of them being "of that grade of feeble-minded who cannot master the public school curriculum beyond the fifth grade, even though they are given many years in which to do it." It is presumed that the 5 cases testing .70 or below who were not included in this group were those "who did not manifest the traits common to feeble-minded persons".

In another report Dr. Ordahl (44) gives the results of tests applied to 341 delinquents at the St. Charles (Illinois) School for Boys. He found that 19.6 per cent had I.Q's of less than .70, and 20.8 per cent to test between .70 and .75. In this study Dr. Ordahl considers all of those testing below .70 feeble-minded, and states that many of those testing between .70 and .75 "would probably prove on further study to be also feeble-minded."

Allen (1) reports on tests made at the Preston School of Industry (California) of 588 delinquent boys ranging in age from 12 to 20 years and over. The Goddard (1911) revision of the Binet scale was used and it was considered that "a score of 12 plus practically constitutes a normal test". A table giving the summary of results for 149 admissions between January 1, 1916 and July, 1916, excluding seven foreigners who were unable to speak English, shows 58 cases, or approximately 39 per cent, to be feeble-minded. Mr. Allen states that "these classifications are the result of a careful consideration of each case and are not made blindly from the mechanical results of the Binet Scale". Tests by Mr. Allen on entering groups at intervals indicated a gradual increase in the proportion of feeble-minded among cases committed to the School, due, he believes, to the development of psychological work in the juvenile courts.

Hauck and Sisson (31) studied 201 boys and girls at the Idaho Industrial Training School. Tests with the Goddard (1911) revision of the Binet scale, supplemented with other tests, mental and physical, indicated feeble-mindedness in 24.6 per cent of the boys and 35.3 per cent of the girls.

Dr. Mabel Fernald (23) carefully examined 100 inmates of the Bedford (New York) Reformatory for women, scoring the results of the tests according to the criteria adopted by different workers for defining feeble-mindedness. The several standards give proportions of feeble-minded varying from 34 per cent to 100 per cent. The proportion having an I.Q. of less than .70 by the Stanford Revision of the Binet scale is 48 per cent. Dr. Fernald pleads for the adoption of more uniform standards in determining who is feeble-minded, since her results clearly indicate that some of the criteria which have been used must be very unreliable.

Ordahl (45) examined 61 representative cases at the juvenile court of San Jose, California, using the Stanford Revision of the Binet Scale. He found 25 per cent of the minor dependent group, and 45 per cent of the minor delinquent group to be feeble-minded.

Haines (29) studied 100 male prisoners at the Ohio Penitentiary, using the Yerkes-Bridges Point Scale. Twenty of the 100 were classed as feeble-minded or demented. A later study of 33 women prisoners at the same institution showed 10, or approximately 30 per cent feeble-minded.

Hickman (33) reports a study of 678 ''new boys'' at the Indiana Boys School, of which the Binet tests showed 58 per cent ''defective'' and 42 per cent ''not defective''. Supplementary individual studies of cases while on parole often verified the test results.

Bowler (6) gave the Binet tests to 75 delinquent girls at the Ohio Girls Industrial School, scoring the results by the Yerkes-Bridges point method. By the criterion of a coefficient of mental ability (C. M. A.) of .75 or less, 34 cases, or approximately 45 per cent, were classified as feeble-minded. Two additional cases were classified as ''psychopathic''. Supplementary data verified the test indications of incapacity for prudent self-management.

What is perhaps the most intensive study of the intelligence of offenders is Dr. Weidensall's ''Mentality of the Delinquent Woman'' (60). This monograph represents an attempt to standardize tests for comparison of criminal women with socially normal women and girls of the working classes. Many individual, physical and mental (including Binet) tests were given, but little attention was given to determining the general level of intelligence. While the classification ''feeble-minded'' is avoided, the conclusion that ''on the whole two-thirds of them (the total number of subjects) are tractable and responsive, and some appreciable number of them at least, other things being equal, may be trained to be efficient and be taught a reasonable measure of self-control'' leaves the impression that the remaining one-third, at least, must be definitely feeble-minded in the social meaning of the term.

Terman and Knollin (55) examined 155 consecutive entrants at San Quentin Prison (California) and after careful and conservative treatment of the data classified 17.9 per cent feeble-minded, and 12.8 per cent ''borderzone'' cases. The writers feel that there are few cases in this 30 per cent who can be depended upon for normal social adjustments.

Kelley (35) made physical and mental tests of 296 boys at the Texas State Training School at Gatesville in 1916. He estimates (p. 62) that 20 per cent of these boys "would better be in a school for the feeble-minded . . . this number being unable to look after themselves with sufficient prudence to keep out of trouble and from being menaces to the community." He further concludes from a summary of his and other data that "probably at least 50 per cent of delinquents are totally incapable of being taught to look after themselves in an environment as unfavorable as that from which they came."

Faber and Ritter (19) report a mental survey of juvenile offenders in San Francisco. The Yerkes Bridges point scale was used. Their classification showed "17 per cent borderline, 9.6 per cent morons, and 4.3 per cent imbeciles (total defectives 30.9 per cent)."

While the foregoing list is by no means exhaustive, the investigations cited represent nearly all of the methods of approach to the problem. The Binet-Simon scale has proved of undoubted value in determining the social competence of offenders. A striking similiarity in the results is that in each instance a high proportion of feeble-minded has been found. Every group of delinquents studied contains a relatively large proportion of socially incompetent persons, however this incompetency may have been determined. Their inability to meet the ordinary problems of life, to compete with their fellow-beings, and to manage themselves with prudence and honesty in the environment from which they come is clearly indicated in their mental reactions, their institutional behavior, and their hereditary traits. Feeble-mindedness is so common in every delinquent population that detention homes, industrial schools, reformatories and prisons have become repositories for feeble-minded persons whose tendencies toward unsocial conduct need no further explanation.

The meaning of feeble-mindedness. The results of the investigations summarized in the previous section have been affected not only by the use of different methods of determining intelligence, but also, and perhaps even more seriously, by the use of different criteria for determining feeble-mindedness. In some studies a mental retardation of three years, regardless of actual age, has been the criterion. It has been repeatedly pointed out that no such standard could be adequate, since "three years retarded" is of varying significance for persons of different ages. In some instances the test results, especially in somewhat doubtful cases, have been almost entirely ignored in classifying subjects who seemed capable of directing themselves with the prudence relatively common to institution inmates. This again is a criteron which admits of too loose interpretation. No group of institution inmates is sufficiently representative of the general population in which discharged cases are likely to float to assume normality for those who do not show great relative inferiority. Moreover, inmates of institutions are nearly always under some sort of supervision, although some may be working with apparent independence. The varying problems and conditions of life, the reaction to which constitutes the social test of normality cannot be present in an institution to an extent compared with competition in the outside world. Even where much dependence has been placed upon apparent success in life outside of institutions the observations are often affected by the lack of satisfactory standards. Suppose, for example, it is learned that Mr. A., a former inmate of this institution, who tested 11 years by the Binet-Simon scale, is "living on a farm in Ohio and is doing well". What is to be our conclusion with reference to the social test? Of course, if we know that he is managing a large farm, has a number of employees under his supervision, handles his own marketing, etc., it is reasonable to conclude that he is not feeble-minded within the social meaning of the term. But on the other hand (which is far more likely to be the truth in this instance, if the tests were correctly given) he may be too feeble-minded to manage the farm, and his duties may consist almost entirely in doing routine work under the supervision of others. In the latter case, he might be socially feeble-minded, although "doing well".

Since every criterion for determining feeble-mindedness is the result of either laboratory measurements or social observations, it seems that the only way in which we may secure reliable results is by combining the data from all sources. It has been pointed out (Chapter I) that a high correlation exists between the results of carefully applied tests of intelligence and social observations by adequately trained workers. The medical examination also furnishes useful data in case of feeble-mindedness. The combining of data does not entirely eliminate the possibility of error, but experience has shown that in this way feeble-mindedness may be detected with a fair degree of reliability in determining its prevalence among delinquents.

Our feeble-minded group in this study consists entirely of cases who show by their mental reactions to tests of intelligence and by their social reactions to ordinary problems of life, to be of decidedly inferior mental capacity. In no case is this capacity sufficient to obtain an intelligence quotient higher than .78, and in all but a few cases the I.Q. falls below .75. All cases considered feeble-minded have been found by repeated observations to be incapable of managing themselves and their own affairs independently, and with the degree of prudence necessary to gain a modest livelihood under the ordinary conditions of life. It is believed that the consistent following of this plan has resulted in establishing the proportion of feeble-minded in this group of delinquents as accurately as the available methods of study and the present meaning of feeble-mindedness will allow. The writer is satisfied that every case classified as feeble-minded in this study would be found to be feeble-minded by any other set of observers given ample time to make parallel investigations. It has been our aim at all times to be conservative, but to avoid the over-conservatism not infrequently resulting from findings which differ strikingly from previously formed opinions.

The influence of heredity. The important work of a number of investigators, notably Goddard (25) and his research staff at the Training School at Vineland, N. J., has left little doubt that feeble-mindedness is an inherited trait, and that a very large proportion of feeble-mindedness may be accounted for by heredity. Family studies beginning with feeble-minded children at the Training School and extending back into several generations, including more than twenty thousand relatives, have revealed mental deficiency in large proportions. In many cases, whole families were found to consist of feeble-minded persons. In approximately three-fourths of the cases Dr. Goddard found abundant evidence that heredity is the chief causal factor. If moron cases alone are considered, the proportion of heredity cases may reach 85 per cent. Feeble-mindedness was found in these families to be transmitted in a way which resembles the inheritance of many physical traits. Considering the difficulties met in studying human traits, the agreement of the data with the Mendelian expectations is strikingly close. To all appearances feeble-mindedness is a unit character, or at least behaves so much like unit characters that the probability of its occurrence may be predicted with reasonable accuracy. The studies of Davenport and his assistants at the Eugenics Record Office have resulted in similar conclusions. Whether or not further investigation will greatly modify these findings, the conclusion seems justified that heredity is the chief causal factor in mental defect.

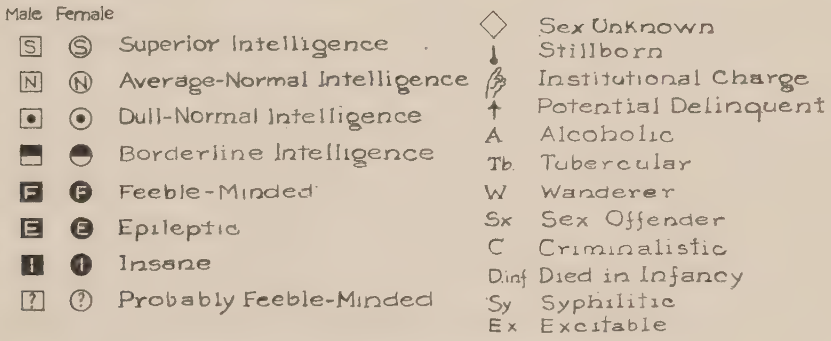

Fig. 7. Key to symbols used in family charts.

Our study of family history has brought to light some important and interesting facts concerning the inheritance of feeble-mindedness. Unfortunately, we have not progressed far enough at the time of this writing to permit of a detailed comparison with the conclusions of others as to the way in which feeble-mindedness is inherited, and whether or not it may be considered a unit character. The limitations of the work in this particular are due, first, to the fact that feeble-minded delinquents, at least in California, are nearly all of the moron grade. Very few may be classified as imbeciles, and idiocy never occurs. Even our morons, although all may be considered definitely feeble-minded, for the most part are high-grade cases. This means that where the defect is inherited, most of the feeble-minded relatives will be very near the borderline, and many of them not generally considered feeble-minded by the persons among whom they are living. Seldom do we find idiots and imbeciles, even among the distant relatives of our cases. Since feeble-mindedness is so widely misunderstood with reference to its upper limits, it is necessary for the field-workers to be very cautious in making up reports dealing with persons whose normality is in question. In some cases intelligence tests have been given to relatives, but it is not practicable to do so to the extent which would be necessary to complete the study of entire families. A scale for systematic observation, standardized on a large number of cases, promises to furnish the most satisfactory method for field-work in which it is necessary to estimate intelligence without tests[1].

In the absence of a completely standardized method for determining who is feeble-minded, the field-worker must rely upon information gathered as carefully as possible and must judge the reliability of the data with some degree of uniformity. It is often necessary to deal with the observations and opinions of persons who are not trained workers and these constitute a source of possible error. Even among teachers, physicians, social investigators and others who have special opportunity for observation, the lack of a commonly accepted definition of feeble-mindedness is often a source of confusion. As a general rule, even untrained observers and relatives are not likely to be mistaken when they believe an individual to be feeble-minded. Where the evidences of social incompetency have become a matter of common observation and knowledge it is usually safe to accept the resulting opinions. In the case of persons commonly believed to be normal the situation is different. Many persons including teachers, social workers, and not infrequently physicians, may assume individuals to be normal, or nearly normal, who are found upon examination, or detailed observation, to be feeble-minded. This is especially true in high-grade cases, whose defects are not evident to the casual observer.

One of the common sources of error with some workers is the tendency to consider all persons normal until known definitely to be feeble-minded. Obviously, such procedure may result in incorrect conclusions with reference to human inheritance. Our practice has

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1. A scale for this purpose is now being devised.

been to consider the intelligence of the individual in question an undetermined trait until sufficient evidence warrants a conclusion. Only those persons are considered feeble-minded who are incapable of managing themselves and their affairs with ordinary prudence, as judged from reliable and reasonably adequate data. It follows that there will necessarily be a number of undetermined cases, but incompleteness is preferable to unsubstantiated data.

The second difficulty met in studying the heredity of our cases is due to conditions which are local, and which are not encountered in the eastern states. Relatively few families have lived in California for more than two generations. Barely one-third of the delinquent boys included in this study were born in California. More than one-half were born east of the Mississippi River, and about 3 per cent are foreign born. Migration to the Pacific slope has been more than doubling the population of the Western states by decades, and this increase consists for the most part of the youngest generation of eastern families. In many instances the family history has been so broken that only with great difficulty and danger of error can it be reconstructed. We find here no families like the Jukes, who for many generations had lived ''along the forest covered margin of five lakes''; or like the Kallikaks who, as Goddard (26) tells us, were so notorious, and had lived so long in adjacent localities that ''the people, in the community where the present generation are living, know of them; they know their parents and grandparents, and the older members knew them farther back, because of the reputation they had always borne''. The excellent studies of the Nams, the Pineys, the family of Sam Sixty, and other degenerate families, have been relatively free from the difficulties met in studying family history in California. If any of our feeble-minded families are related to the Jukes, Kallikaks, Nams, etc., (which is not at all improbable) the coming of the last generation to the West has aided in temporarily concealing their identity.

Despite these obstacles, the data thus far obtained have been extremely significant. Most of our feeble-minded cases come from families where feeble-mindedness is so common that its inherent nature cannot be doubted. In cases where direct inheritance is not so evident there are still indications of the influence of hereditary traits. Some representative family charts are shown in connection with the reports on individual cases. Further study is likely to result in more rather than less convincing evidence that most feeble-minded delinquents come from families which consist largely of persons who are socially incompetent by reason of hereditary mental defect.

Feeble-mindedness and social conduct. Many specific observations have led to the conclusion that the social behavior and success of individuals are largely dependent upon intelligence. Other factors, including temperamental traits and environmental influence are, of course, important; but on the whole it may be said that high and low intelligence mean success and failure respectively, with reference to the ordinary requirements of society. Intelligence tests, supplemented with data on heredity and other influences, have added much to our knowledge of human conduct, inasmuch as we can study the behavior of a given individual in the light of what we know of his mental level and the rate at which his intelligence is developing.

Since feeble-mindedness implies a relatively low intelligence, it is to be expected that the behavior of feeble-minded persons would be more nearly like that of much younger persons than normal persons of the same chronological age. This, indeed, has been found everywhere to be true. Dr. Goddard cites case after case of feeble-minded adults whose everyday life is the life of young children. Their likes and dislikes, their play and their work reactions, closely resemble those of normal children of a corresponding mental age. Terman (54) also gives a number of cases where social observations verify the tests. We need little further evidence to convince us that feeble-minded persons are as a rule about equally feeble mentally, morally, industrially and socially.

Our own data agree closely with the findings of other investigations. This agreement is all the more significant in view of the different methods of approach. To students of feeble-mindedness, delinquency is but one of the manifestations of intellectual weakness. To the student of delinquency, feeble-mindedness is but one of the causes of unsocial behavior. From both points of view the feeble-minded individual is a menace to society, and if left unsupervised will eventually become a public charge, either as a dependent or as a criminal. Both Goddard and Terman emphatically assert that feeble-minded persons are always to be considered potential delinquents or criminals. Terman (54, p. 11) says:

"But why do the feeble-minded tend so strongly to become delinquent? The answer may be stated in simple terms. Morality depends upon two things: (a) the ability to foresee and to weigh the possible consequences for self and others of different kinds of behavior; and (b) upon the willingness and capacity to exercise self-restraint. That there are many intelligent criminals is due to the fact that (a) may exist without (b). On the other hand, (b) presupposes (a). In other words, not all criminals are feeble-minded, but all feeble-minded are at least potential criminals. That every feeble-minded woman is a potential prostitute would hardly be disputed by any one. Moral judgment, like business judgment, social judgment, or any other kind of higher thought process, is a function of intelligence. Morality cannot flower and fruit if intelligence remains infantile."

The observations of Goddard (25, p. 515) have resulted in the conclusion that the expression of criminality in feeble-minded persons is dependent upon temperament and environmental influences. Those who are nervous, excitable and impulsive are almost certain to indulge in some form of waywardness or crime. The destruction or removal of valuable property is no more wrong in the comprehension of a feeble-minded man than any one of many childhood pranks which we allow to go unnoticed or excused. Even the right of other persons to live may be doubted in the feeble reasoning of the excitable, impulsive offender. On the other hand, feeble-minded persons of quiet, phlegmatic temperament, with weakened impulses, are not so likely to commit aggressive crimes. They may, however, become the tools of more intelligent criminals, and thus become the real, but in one sense innocent, offenders.

Both of these temperamental extremes are found among our cases of feeble-minded delinquent boys. Cases F-19, F-58 and F-140, are examples of the high-strung, easily provoked, impulsive extreme. Although these are now mere boys, the study of the family history and early development shows that if turned out to make a living for themselves, some form of crime is sure to result. On the other hand, cases F-3, F-18, F-27 and F-141 are temperamentally quiet and phlegmatic. All of them have committed juvenile offenses, but whether they would have become delinquent entirely on their own initiative is open to question. We can easily imagine that it would have been necessary for them to steal, inasmuch as they have all shown inability to make an independent living. F-3 is an especially good example of how feeble-minded persons of this temperament may be duped. He was led into a burglary by a band of thieving Indians and his excitable half-crazed brother, F-10.

Potential feeble-mindedness. Recent studies tend to show that, although the I.Q. is a reasonably constant index of intelligence, there are some cases in which its constancy is not maintained. These are what have been called "potentially feeble-minded" cases. Apparently we cannot be sure that intelligence tests alone, in the case of very young children, will always tell us which are feeble-minded. Doll (17) has made a study of a number of potentially feeble-minded children, testing them at significant intervals and making use of supplementary data on conduct, appearance, physical conditions, etc. It was found that certain children who were apparently normal at an early age (e. g. seven or eight years) were not actually developing at the rate indicated by the I.Q. A case is reported, for example, of a boy who was tested at six intervals, with the following results:

(a) age 7-7: mental age 7-0. I.Q. .91
(b) age 8-5: mental age 7-6. I.Q. .89
(c) age 7-8: mental age 6-1. I.Q. .82
(d) age 10-9: mental age 8-2. I.Q. .75
(e) age 11-3: mental age 8-0. I.Q. .70
(f) age 11-9: mental age 7-4. I.Q. .60

Thus, judging from the I.Q., this boy was at first nearly normal, or perhaps backward; three years later the I.Q. justified the classification "borderline". The last test, however, given at an age at which social and intellectual development has had ample opportunity for expression, shows him to be definitely feeble-minded. Since the last test is the most reliable for predictions as to future development, we must conclude that the I.Q.'s resulting from the previous tests were not true indices of the rate of mental growth.

A potentially feeble-minded child is defined by Doll as one "whose ultimate mental development does not exceed that of a normal child of twelve years, but who at the time of the first examination does not show a difference of more than three years between the mental and chronological age." The determination of potential feeble-mindedness at the time of the first test is hazardous, because the evidence consists almost entirely of observations on behavior, physical appearance, and analysis of test responses. The last named method is probably more reliable than the others. A considerable amount of "scattering" in the tests is usually indicative of some form of mental instability or uneven development. Predictions of probable feeble-mindedness, to be reliable, should be made only after repeated tests. The I.Q. has been found to remain so nearly constant in most children that a decrease of several per cent is always significant. The greater the number of repeated tests the greater the significance of the decrease.

There are few among our cases who show indications of being potentially feeble-minded. This is due chiefly perhaps to the small number of cases chronologically under ten years of age. There are some cases, however, which are suggestive. Case B-128 may be potentially feeble-minded. His I.Q. at the time of the first examination was .86. Indications of feeble-mindedness were evident at that time but were not considered especially significant. Although ten years of age, some of the test responses were given in a foolish manner, and unlike those of most children of that age. His personal history also shows somewhat abnormal social development. Since the force of environmental influences is so little understood, it is manifestly unfair to attempt too sweeping conclusions[2].

Case B-124, whose I.Q. is .83, has a similar history. Although he earns by the scale in mental age ten years, he is unquestionably more stupid than a normal child of ten. It will not be surprising if later tests show a lower I.Q. Case F-141 is a dull, stupid, slowly reacting negro boy. He shows many indications of intellectual and social feebleness far below the expectations from the I.Q. .78. In school he has ''stood still'' for several years. It is possible that his mental level may have been for some time about what it is now.

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[2] Since the tables were prepared a later test showed in this case an I.Q. of .78.

These remarks concerning potential feeble-mindedness are based for the most part on conjecture, but the subject is sufficiently important to justify its mention here. Further investigations are urgently needed to aid in determining who is feeble-minded, and in estimating the probable rate of intellectual development.

''Moral imbecility''. The existence of a separate moral sense which may be seriously retarded in persons otherwise normal, has been the subject of much discussion among criminologists. Despite repeated failures to discover cases which may be so designated, the belief is still entertained by many persons. Parents, teachers, and probation officers not infrequently cling to the belief that the delinquency of a child in their care may be explained on the ground of imperfect development of the moral ''faculty''. The stigma attached to moral degeneracy seems easier to accept than that of feeble-mindedness or mental disorder.

Nearly every feeble-minded delinquent boy who has come under our observation would seem upon superficial examination of the history of his conduct to be less developed morally than intellectually. This is because of the different ways in which the moral and the intellectual aspects of mentality are exhibited. A feeble-minded person may not appear to the ordinary observer to be greatly inferior intellectually, since weakness in the process commonly considered intellectual is clearly evidenced only when the weak-minded person actually attempts a task beyond his comprehension. If such tasks are not attempted (and they usually are not, voluntarily) there seems no reason for concluding that the individual in question does not have the capacity to do them. With the reactions commonly designated as moral, however, the situation is different. Inferior moral reactions are more easily observed. A feeble-minded young man, twenty years of age, may show his inferiority by committing an immoral act, without having exhibited other marked evidences of feeble-mindedness. His moral conduct may truly resemble that of a child of ten years. Laboratory tests will ordinarily show that he is not only morally, but also intellectually, weak.

It is interesting to note that almost without exception the so-called ''moral imbeciles'' are found to be feeble-minded. There is as yet no scale of tests for moral development[3], and it may be found that moral and intellectual development are so closely associated that they cannot be tested separately. Even if we had separate means of measurement, it is very likely that persons feeble in the one sense would usually be found about equally feeble in the other. Since the Binet scale determines the general level of intelligence, it is ordinarily safe to assume, for the present at least, that the level thus established is the level of both intellectual and moral development.

Some of the tests in the Binet scale appear to be tests of moral comprehension[4]. Thus, Davenport (15, p. 9) has been led to think that ''there are moral imbeciles who can answer all but the moral question for their age.'' It is intended, of course, that some of the ''comprehension'' tests should represent moral situations. It is quite possible, also, that a child whose intelligence level is eight years might fail on any one or all of the ''comprehension'' tests, since very few children whose mental age is eight years pass all of the tests in the group designated ''year VIII''. It would be just as incorrect, however, to assume the failure on these tests to mean specific moral retardation, as to assume that the failure of a child of nine on the form-board represents very poor mechanical ability. It has been repeatedly pointed out that the Binet tests are not intended to measure specific mental traits, but to determine the **general level of intelligence**, in so far as it may be judged from the results of its application in various situations in which intelligence is required. Some of the situations created for the experiment involve the use of intelligence in moral situations, others in mechanical situations, others in situations involving visual imagery, etc. In short, intelligence is measured by its relative efficiency with reference to the ordinary fields in which it is used in everyday life. Performance in drawing the designs is not an index of capacity for visual imagery; success or failure with the form-board does not justify general conclusions as to mechanical ability; and replies to the "comprehension" questions alone do not tell us much with reference to moral development. Moreover, situations involving moral judgment are not confined to the comprehension tests, but may be found in many others as well.

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[3] Dr. G. Hardy Clark (10) has published a tentative scale for grading moral development, but at the time of this writing there are no comparative standards. Other scales are being devised by Professor P. E. Davidson of Stanford University and Milton Fairchild of the National Institute of Moral Instruction.

[4] E. g., Year VIII, test 3 (a) "What's the thing for you to do when you have broken something that belongs to someone else?" and (c) " . . . if a playmate hits you without meaning to do it?"

Healy (32, pp. 782-788) has reviewed the literature on "moral imbecility" and "moral insanity", including the work of Prichard, Barr, Tredgold, Mercier, Kraeplin, Berze, Anton and others. He finds that almost invariably the supposed cases of one-sided development resulting in moral atrophy show a history of "mental abnormality outside the sphere of ethical perceptions". Among his own cases Healy finds none which can be properly designated by the term "moral imbecile". Our experience leads us to the same conclusion. However, further investigations are needed to determine the extent to which morality is an independent trait.

CASE STUDIES.

There is a significant similarity in the personal and family histories of feeble-minded delinquents, insofar as the factor of intelligence is concerned. Nearly all of these boys have failed repeatedly in school, at home, at work, and wherever they have been required to face the ordinary problems of life. They have been unable, usually from an early age, to manage themselves and their affairs with common prudence. Many of them have been public nuisances and public charges; through no fault of their own becoming parasites on the social order that has allowed them to come into the world and remain unsupervised until the onset of adolescence made it necessary to take such steps. The family histories, while not as complete as we should like to have them, show that there is ample evidence of inherited defect. None of our defective delinquents has come from a family of normal, law-abiding persons.

The following ten case studies are representative of our 141 feeble-minded delinquent boys, and include some of the significant points in their development and social conduct. A summary of data on all cases may be found in Table I, Appendix. For more detailed studies of significant cases of defective delinquents the reader is referred to the ''Criminal Imbecile'' of Goddard (24) and the case of Alberto Flores, reported by Terman (56).

CASE F-2.

Test results. Age 13-10. Mental age 6-8. I. Q. .48. Feeble-minded. Was unable in the tests to carry out three commissions (year V), in the correct order. Other failures in low years are picture omissions, 16 syllables (VI) differences (VII), counting 20-0, comprehension and similarities (VIII). Some of the graphic responses are shown in Fig. 8. Many normal boys of six or seven years of age show better comprehension and adaptability to these simple tests.

Observations. Slow, dull appearing and obviously defective. If he were with a group of normal persons any observer would be able to select him as the one defective. Underdeveloped physically. Childlike in his play. His teachers all classify him as feeble-minded and incapable of making progress in school. Can barely write, and cannot read as well as most children six years of age. Cannot spell his name correctly. Has never conducted himself as a normal child. Is listless and when told to do a thing gives no verbal response, but after being told several times usually goes ahead with the task. His powers of comprehension are so weak that it is often necessary to explain very ordinary operations to him in simple language as one would explain to a young child.

Delinquency. Immorality, incorrigibility, vagrancy. Principal offense consisted in attacking smaller boys. Always associated with bad companions.

Personal history. Born near the Mexican border. Brought up "almost like a little wild animal." Has had ample opportunities for education, but has been in ungraded rooms and special schools since beginning. Has never taken any interest in school or work.

Family history. The family chart (Fig. 9) shows much feeble-mindedness. The father is described as a worthless, drunken fellow. The mother has been a prostitute for many years and has had innumerable men at her home, the condition of which is far from desirable for the bringing up of children. The home index is but 6 points, one of the lowest we have found among all our cases. The other children are said by their teachers to be feeble-minded, their hopeless stupidity making them a burden to the school.

Conclusions. Clearly a case for permanent custodial care, as are probably many others in the family. As an industrial school case, F-2 is almost hopeless. He cannot be instructed with other boys, and it is impractical as well as costly to provide special instruction for him. His chances for "reform" are very slight, if by that is meant returning him to society as a self-supporting citizen, socially and morally developed to the point at which he can manage

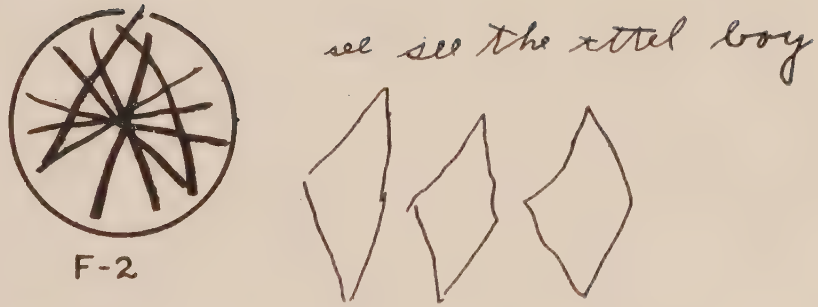
F-2
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Fig. 8. Test performances of F-2.

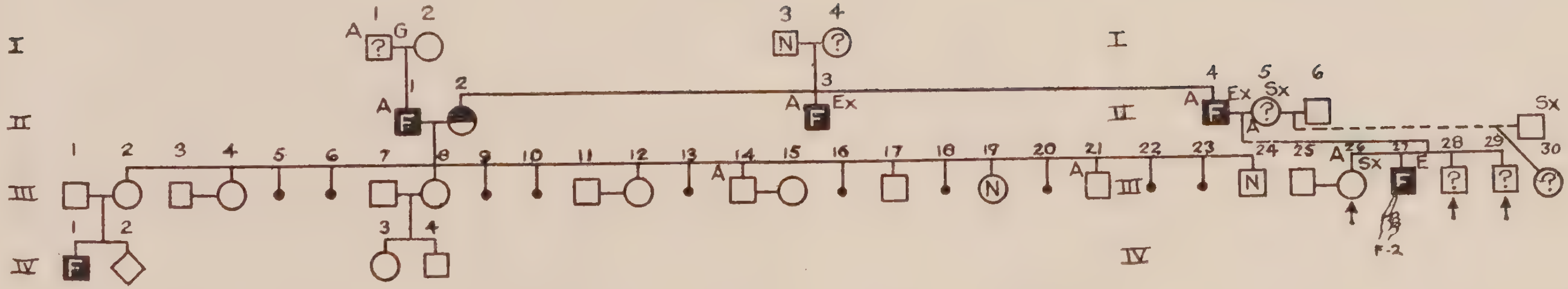

Fig. 9. Family of F-2.

himself and his affairs with ordinary prudence. We estimate his probable limit of development at 8 years.

CASE F-3.

Test results. Age 16-0. Mental age 8-1. I.Q. .51. Feeble-minded. Some of his inferior performances are shown in Fig. 10. Failed on practically all tests above year VIII, although carried through to average-adult tests. To the question (Year VIII) "What is the thing to do when you are on your way to school and you see that you are in danger of being late", he replies, "take a rest". Cannot name the months, tell the value of ordinary 1 cent and 2 cent stamps, nor make change for small amounts of money. See test results reproduced in Fig. 10.

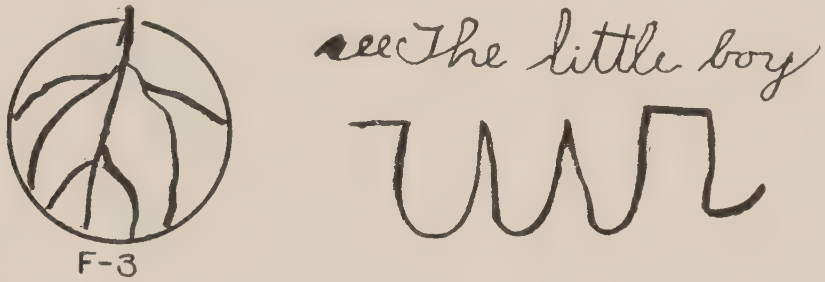

Fig. 10. Test performances of F-3.

Observations. Dull appearing, phlegmatic, intolerably slow in speech and movement. Responds to tests in the child-like manner so characteristic of the feeble-minded. Cannot adapt himself, either at work or play, as do most other boys of his age. Works well under supervision, but cannot plan. Everything must be laid out for him. Physically well-developed although slightly undersize.

Delinquency. Principal and only offense, burglary. With his brother, F-10, was caught robbing a bank in company with a small band of Indians. Conduct otherwise good.

Personal history. No record of serious illness or accident. Was brought up in a lonely spot in the mountains where the influence of civilization seldom came and where little intelligence is necessary to relative social normality. Reached the second grade in a country school, but was unable to go farther. School history, conduct and industrial record all bear out the results of the tests. Has always been feeble-minded. Has no more comprehension of the wrong involved in the act of burglary than a child of eight years could be expected to have. Has made a good record at the State School, and probably because of his phlegmatic temperament and lack of energy seldom violates the rules.

Family history. Records incomplete. It is certain that many members of the family were feeble-minded. The brother, F-10, is now in a hospital for the insane. A younger sister is in an institution for the feeble-minded. The father was a miner and drank heavily. Recent records indicate that he may have been insane. The family depends entirely upon county support.

Conclusions. There is little probability that F-3 will ever be able to manage himself and his affairs with ordinary prudence. Will probably not develop a level of intelligence higher than that common to children of 9 years. Steps have already been taken to transfer him to an institution for permanent custodial care.

CASE F-8.

Test results. Age 20-40. Mental age 8-8. I.Q. .54. Feeble-minded. Note sample test performance in Fig. 11. That a young man of practically 21 years of age should do so poorly in a test of writing four common words which he understands is in itself evidence of very low intelligence. Failed also in naming months, making change, arranging weights, and practically all tests above IX year level.

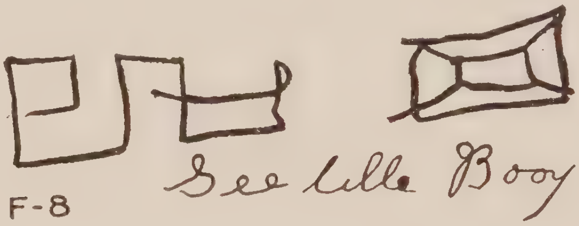

Fig. 11. Test performances of F-8.

Observations. Quiet, phlegmatic, slow and obviously stupid. Interested in the tests, much like a little child. At the State School he has been found incapable of independent work, but does well under close supervision. His most successful assignment was that of picking up papers, rubbish, etc. about the grounds.

Delinquency. Incorrigibility, truancy, dependency.* Also minor thefts from home. Continually ran away from the home of the relatives with whom he was living, and was beyond their control; this notwithstanding the high quality of their home. Preferred sleeping out in unusual places to remaining in his own room. Very disobedient and untrustworthy.

Personal history. Born in a southern state. Injured by a fall from a window when a small child. Has a badly deformed hip and foot (club-foot) which may have been congenital. Shows signs of syphilis, which if present, must have existed from infancy. Attended school until 15 years of age, during which time he was unable to pass out of the second grade, and was totally illiterate. At that time was committed to a state industrial school where he remained four years. Was unable to learn even the simplest tasks. Sewing on buttons, mending shoes and such work was impossible. The superintendent of the institution writes "He is very good at housecleaning and is fine for a handy boy to do little chores about the house. Is very susceptible to praise". Released on parole at 18 years of age, came to California to live with relatives and was committed to Whittier the same summer. Released at 21 years of age and placed in charge of a family for whom he was to do odd jobs.

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*Dependency is listed with offenses by reason of its legal meaning in California, explained in Chapter VII.

Family history. Little information available. People were southern whites, probably of inferior stock. Father was intemperate. Other instances of syphilis in the family suggest hereditary taint.

Conclusions. The social and test criteria agree remarkably well in this case, both indicating definite feeble-mindedness. Is really a case for permanent custodial care. Surely he cannot manage his affairs with ordinary prudence. Time alone will tell the extent to which he is happy and successful in his present home under private supervision. Will probably not develop to a mental age of more than 9 years.

CASE F-9.

Test results. Age 15-0. Mental age 8-4. I.Q. .55. Feeble-minded. Failed on nearly all tests above VIII year level. No scattering. Some significant "performance" test failures: weights, form-board, ball and field. Spent four minutes doing form-board test in attempting to crowd blocks into spaces for which they were obviously too large. Could define but 14 words in vocabulary list.

Observations. About average size, in good physical condition, except for defective eyes, infected some time previously, irritated by habitual rubbing. Vision not seriously impaired, and was under treatment at time of test. Temperamentally phlegmatic, suggestible, takes up with any sort of influence, but does not seek mischief. Works best when left by himself. Can do only routine tasks, such as driving team, rough farm work, etc. Unable to plan or to foresee ordinary consequences. Very childlike.

Delinquency. Immorality, dependency, incorrigibility, stealing. Principal offense, immoral association with brothers, sisters and other relatives. Beyond control of his parents. Habitually stealing. Failed repeatedly on probation.

Personal history. Attended school four years, reached third grade. School work unsatisfactory. Parents dead, could not get along with relatives. Employed for a while as laborer in cement works, but discharged for theft. Committed at 14 years of age. Paroled twice without success and returned. Has difficulty in obtaining employment and cannot keep it when found. Now on parole for third time, working in fruit packing house.

Family history. Family of Mexican descent. Grandfather was an early settler who had many children by two women. The whole family, with two exceptions (details not obtained) is reported "immoral in many respects and of the vicious type". These people have provided the worst kind of influence for the children. A sister of F-9 is in another institution as a dependent. The mother was considered insane at the time of her death.

Conclusions. It seems safe to assume that F-9 will never develop the intelligence necessary to manage himself properly on his own responsibility. It is unsafe to return him to his own people with whom he has been unable to get along. If under the supervision of persons other than relatives, there is grave danger for his moral welfare. Yet he has shown his ability to work well under institution conditions, and this suggests the advisability of keeping him under permanent custodial care. There is reason to believe that he would be happy in a properly conducted moron colony. Will probably not develop a mental age higher than 10 years.

CASE F-10.

Test results. Age 19-3. Mental age 8-10. I.Q. .55. Feeble-minded. Some "scattering" up to X year tests, but failure on all thereafter. Some typical definitions: lecture, "votin"; quake, "equator"; nerve, "got nerve to swipe anything"; majesty, "some kind of a lantern". Hopelessly failed on weights, form-board (Healy A), making change, designs. Was carried through all tests between year VII and superior adult.

Observations. Any one witnessing the test would agree that F-10 is feeble-minded. His child-like reactions, spontaneous comments and laughter were in themselves indicative of serious deficiency and mental unbalance. Similar behavior also characterizes his everyday life. Nervous, high-strung, instantly distracted, talkative, often amusingly absurd. No one with whom he has come in contact considers him normal.

Delinquency. Principal and only offense, burglary, with his brother. Case F-3 (q.v.).

Personal history. Similar to that of F-3. Neither of these brothers has ever been considered normal. F-10 attended school for several years, but remained in the first grade. Almost unable to profit from school instruction because of low intelligence and emotional instability. Committed to the State School at the age of 13. Learned to do miscellaneous jobs under supervision. Had no choice of work, and was perfectly happy at cleaning kitchen pots and pans. Became irritated and restless upon the slightest provocation, and for this reason was a constant scource of annoyance. Could not profit from group instruction. At the age of 20 years was transferred to a hospital for the insane. The following lines are extracted from the notes of the examining psychiatrist:

> "Has a fixed delusion that some one is trying to kill him. This generally takes the form of an attempt to poison. Also believes he will be hanged. Says that a woman comes to the dormitory at night with poison in her hand for him. He has also seen her during the day. Says he has several fast horses, a black, a bay and a blue. The last (the blue) can run 160 miles a second and lives on snow. The boy has made frequent assaults with a knife, but has always been

apprehended in time. Has lapses of memory. It is sometimes necessary to tell him several times to do a thing before he is able to carry out the commission."

Conclusions. We are convinced that this is not merely a psychopathic case, in the sense to which that term refers to mental degeneration in persons who were once normal. (Doll, p. 200). It is safe to conclude that whatever may have been the cause of the mental enfeeblement of F-10 it has existed from a very early age. He may be classified as socially feeble-minded by reason of his inability to manage himself and his affairs with ordinary prudence; and none of the tests (note that he was carried through the adult levels) show indications of normal intelligence within four years of the age at which he became physically mature. We may safely place his probable limit of development at the mental age of 10 years.

CASE F-11.

Test results. Age 13-4. Mental age 7-6. I.Q. .56. Feeble-minded. Failed on all "checks" in naming days of the week. Failed in test of making change, took 65 seconds to count backward from 20 (although he finally succeeded with one error), could not tie a bow knot. Vocabulary index 14.

Observations. Physical condition, good, but has appearance of low mentality. Temperamentally phlegmatic. Slow, dull, stupid.

Delinquency. Stealing, burglary. Was an habitual thief. Arrested five times for burglary, before the age of 13. Has always been with a small gang composed mostly of low-grade Mexican boys, to which class he himself belongs.* These boys were in the habit of "junking" or picking up old sacks and other things of small value and selling them. F-11 was reported to be more of a scavenger than the others, and would often pick food out of garbage barrels. Always played on the streets.

Personal history. The foregoing statement of delinquency conduct is representative of his life since starting to school. Committed to the State School at 13 years of age. Had attended school regularly for about three years, and reached the second grade. Would not go to school unless accompanied by an attendance officer.

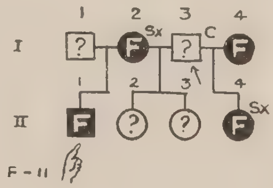

Fig. 12. Family of F-11.

Family history. At home F-11 was exposed to immoral conditions. The mother, a feeble-minded woman, was associated with a crowd of thieving, drunken, immoral Mexican men and women who usually gathered at her house. Father deserted the family, his whereabouts now unknown. Stepfather is a low grade character and has a feeble-minded daughter by another wife. It is doubtful if any member of the immediate family is normal. (See family chart, Fig. 12).

Conclusions. This boy has always been considered feeble-minded by his teachers and relatives, but owing to the unfavorable conditions at the home it was not supposed that he was permanently defective. While he will doubtless improve under better influences, it seems highly improbable that he will ever develop much above the mental age of 10 years.

CASE F-12.

Test results. Exact age unknown, but between 20 and 30. Mental age 9-0. I.Q. .56. Feeble-minded. Passed but one test (drawing designs) in year X and none beyond. Had been given the same tests by two other examiners during the previous few weeks, but we found little evidence of successes that could be thus explained. Ball and field performance was barely score 2 (inferior plan, normal for 8 year level). Could not make change for 12 cents out of 15. His rhyme for **day,** "night"; for **mill,** "milk", will, fill, well"; for **spring,** "water, straw". Throughout the tests one sees the immaturity of intellectual quality which makes the performance resemble that of a young child.

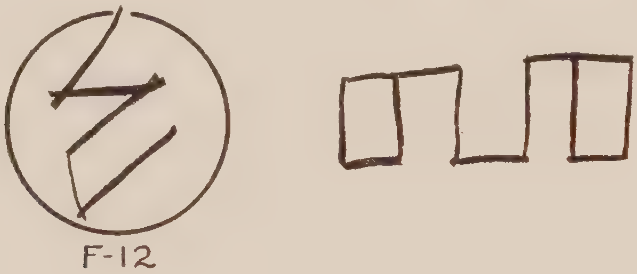

Fig. 13. Test performances of F-12.

Observations. Physical condition good. Temperamentally phlegmatic. Quiet, slow, dull, stupid. Sits for long periods gazing into space. Not easily disturbed. Takes passive attitude toward tests, probably his characteristic manner toward everything else. This is especially significant inasmuch as the tests were given at the jail.

Delinquency. Held for murder of a family of three persons, his employers. Alternates between confession of guilt and declaration of innocence, depending upon the pressure brought to bear. (Was finally convicted).

Personal history. Few details known. Has always been considered a simple, harmless fellow, and reliable for routine work. Has never been assigned to entirely independent duties because of his obvious stupidity. Left school at about the fourth grade because he "didn't like it." Never learned to read understandingly.

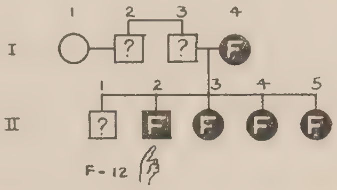

Fig. 14. Family of F-12.

Family history. The family chart (Fig. 14) shows much defectiveness. The mother kept a dirty, disordered house. The three daughters, who have worked as nursemaids, are all reported incompetents. The mother's brother is an epileptic.

Conclusions. This case has been included because this man, but little older chronologically than many of our industrial school boys, has shown the signs of potential delinquency from an early age. Although obviously feeble-minded, he has kept out of an institution because of his apparent harmlessness. This very temperament, however, made him more susceptible to evil influences perhaps, than a normal boy would be under the most unfavorable environmental conditions. This case is but a repetition of many others on record in which feeble-minded children have been allowed to grow up in communities in which their stupidity is taken as a matter of little consequence, or, in some cases, even humorous. Sooner or later, subject to chance prevention, these adult-children commit offenses by which their menace to society becomes known.

CASE F-18.

Test results. Age 16-0. Mental age 9-5. I.Q. .59. Feeble-minded. No successes above ten year tests. Could name but 33 words in three minutes, although tried his best. Failed on reading test, arranging weights, did not know the date within four months. Typical moron performance.

Observations. Quiet, unobtrusive, happy boy. Undersize, plays and acts like a child. Very easy to get along with. Highly suggestible. Gives no thought or concern to his delinquent conduct, but tries to do whatever he is told.

Delinquency. Immorality, stealing, truancy. Lewd habits, although had not actually committed sex offenses. Habitual thief, principally with motorcycles, and would not go to school. Sent to State School for better supervision than provided at home.

Personal history. Reached third grade in school, although could not read at the time of the test. Allowed by parents to remain out of school because of his disinclination to attend and his weak physical condition. Had several factory jobs but could not hold them. Committed to State School when 15 years of age. Has done well under supervision, working as a farm helper and more recently at woodworking in which he is perfectly happy. Cannot plan his work, however, and probably could not keep employed outside of the school.

Family history. Several cases of feeble-mindedness. Parents, low-grade immigrants, whose failure, after many years, to adjust themselves normally to conditions in this country is significant. Certainly they have little concern over the welfare of their children.

Conclusions. The response which F-18 has made to the training and supervision of the State School, indicates that he can probably become self supporting, if under supervision. His many stupid errors in meeting practical problems of life make placing him upon his own responsibility a dangerous measure. Would be an excellent charge for a moron colony, and it is doubtful if he would desire anything else than such provision, if tactfully made. Is not likely to develop a mental age higher than 10 years.

CASE F-63.

Test results. Age 15-9. Mental age 10-5. I.Q. .66. Second test: Age 16-9. Mental age 11-0. I.Q. .69. Feeble-minded. Some characteristic responses: **Charity** means "have a party". Fable of milkmaid: "teaches us not to put things on our head". **Juggler:** "Kind of a jug". Vocabulary index 41. normal for twelve year level. Diagnosed by court physician as feeble-minded.

Observations. Does not seem feeble-minded from ordinary conversation, but has physical appearance frequently associated with mental deficiency. Would probably be detected by any trained observer. Greatly interested in tests, did not tire at all. Uses fairly good words, seldom makes grammatical errors Slovenly in dress and actions. Temperamentally phlegmatic. Works well and with interest under supervision, in routine tasks. Cannot be assigned with success to independent work.

Delinquency. Stealing, truancy. Stole small sums of money from relatives only. Habitual runaway from home and school.

Personal history. Has always been considered defective by relatives. Has at times shown symptoms of epilepsy. When 9 years of age was so small and delicate that a nurse said he would never grow up. Was injured by falls at 6 and 10 years which are said to have affected his intelligence. Reached fifth grade in school (by automatic promotions) but is reported by teachers to have made little real progress. Did not like school work and continually ran away. Committed to State School at the age of 15. Observations and tests here bear out testimony of relatives and teachers with reference to his irresponsibility.

Family history. Mother is feeble-minded (See Fig. 15) and several other members are probably defective.

Conclusions. Our decision in this case is based upon the following evidence: (1) intelligence tests, given by the writer, witnessed by physician who agreed that the tests disclosed the true conditions; (2) another test a year later; (3) examination by the court physician, who found the boy feeble-minded; (4) testimony from teachers, relatives and probation officers, that the boy is defective and unable to manage himself and his affairs normally; (5) observations extending over the period of a year between two tests. In the light of the data thus gathered, we feel safe in concluding that F-63 is feeble-minded, and that he is a case for permanent custodial care.*

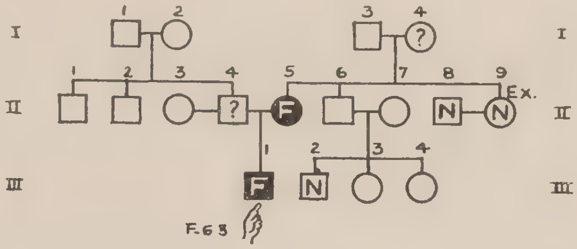

Fig. 15. Family of F-63.

CASE F-140.

Test results. Five tests: (1) Age 14-8. Mental age 11-4. I.Q. .77. (2) Age 14-9. Mental age 11-8. I.Q. .79. (3) Age 15-8. Mental age 11-5. I.Q. .73. (4) Age 16-7. Mental age 12-10. I.Q. .80. (5) Age 17-10. Mental age 13-0. I. Q. .81. Some unexpected successes in last test: fables (adult performance), clock problems (a and c), code (6 minutes with 1 error). Notable failures: arranging weights (1 error in trials 1 and 3), reading and report (only 5 memories), 5 reversed digits. Vocabulary 51 (normal for 14 year level.)

Observations. Physical condition good. Temperamentally nervous, active, energetic. Greatly interested in work which is given him, especially tests and games. Extremely talkative. Has remarkable (considering his low intelligence) verbal memory. Can accurately recite passages several pages in length if given a few days in which to learn them. Knows the names of many things that can be learned in groups, such as birds, trees, presidents, countries, etc., in the learning of which he takes great delight. That he does not intelligently comprehend what he memorizes is evidenced by his inability to explain certain passages, which he recites with the reliability of a phonograph. Failed utterly on the sense of selection (XVI) tests, which are passed by ordinary boys of his age, who would envy him for his apparent powers of memory. Cannot repeat seven digits or reverse five. In working out a problem involving the number of times 20 is contained in 300, said "I would keep putting down 20's until I got enough of them to make 300." This, however, he proved unable to do. At his industrial work, he shows his deficiency more noticeably than many feeble-minded boys who test much lower. His incompetence at independent tasks is an established fact by all who have observed him. He can do successfully only what is planned definitely for him. These things, however, he has done pleasantly and with efforts pathetically deserving of praise.

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*Upon the strength of these findings F-63 has been transferred to an institution for the feeble-minded.

Delinquency. Vagrancy, immorality, incorrigibility. Has never stolen. Wandered about, had bad sex habits and refused to obey parents. Abusive to his mother who is a working-woman, she herself being feeble-minded. Committed to State School because of danger of more serious delinquency.

Personal history. No injuries or serious illness to account for his mental deficiency. Abused by his father much when young. Reached fifth grade in school, but could not advance normally. Has been in several private institutions for short periods, in none of which he could be successfully managed. Has shown his mental weakness from an early age. Taken in charge by juvenile court at 14 years of age and committed to Whittier. Has been tried in many kinds of work, with failures noted in previous lines.

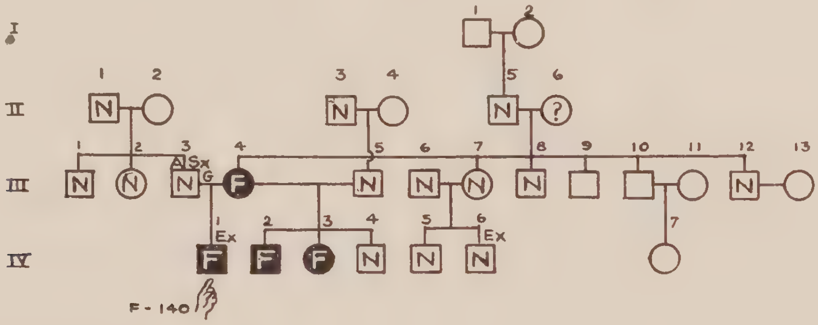

Fig. 16. Family of F-140.

Family history. Mother is feeble-minded, as are other children by her second husband (Fig. 16). Excitability is common. Apparently, most of mother's people are normal. The following lines are extracted from a letter written by the mother: EXTRA

> I forgot to tell you that I am getting gray hair in my head. I think I will be entirely gray before another year. I pull all the gray hairs out that I can find. I think I will go plum crazy soon.

Conclusions. Here is an instance of a social incompetent who shows, even by standardized tests, indications of higher intelligence than do most feeble-minded persons. That this slight superiority is real is proven by repeated tests and observations. By these same criteria, however, it is equally evident that the superiority is of little practical advantage. Psychologists, physicians, teachers and others who know him agree that he is feeble-minded in the social and industrial sense. No one of his instructors would think of placing him in a position in which ordinary prudence is required. The superintendent of the institution will not permit him to leave without guarantee of continued supervision. That he tests near the upper limits which usually bound mental deficiency is no justification for changing our diagnosis. He will probably not reach a mental age higher than 13 years, and by other tests equally well standardized, we cannot expect him to test much above the 12 year level.

CHAPTER III. THE BORDERLINE GROUP.

(27.2 per cent of the 470 cases)

Meaning of borderline intelligence. This group includes 128 cases who possess sufficient intelligence to escape classification as feeble-minded, but who are so inferior to average persons of the same age that they are nearly reached by the criteria designating our lowest group. Representing the intermediate grades between definite feeble-mindedness and dull-normal intelligence, these cases present a problem more difficult in some respects than that of any other group. Terman and Knollin (57) believe that the correct diagnosis of these cases constitutes one of the most important problems in clinical psychology. There are two dangers involved: (a) the overestimating and (b) the underestimating of the number of mentally defective individuals in a group of individuals who have been tested. These authors point out that even slight variations at this point may lead to serious misunderstanding; for if a borderline child is "rated as not feeble-minded the parents ordinarily interpret this to justify the expectation of a fairly normal development. On the other hand, if a child is rated as feeble-minded, who although dull, has nevertheless a degree of intelligence which will enable him to live a fairly normal social and industrial life, the mistaken diagnosis may result in depriving such a child of the very opportunities necessary for his fullest development." In institutions such misunderstandings are not so likely to occur, for teachers and supervisors may be expected to become familiar with terms descriptive of the different intelligence groups. The classification of borderline cases, however, even where the subsequent training will be based upon a clear conception of what is meant by the term, is more difficult than differentiating the definitely feeble-minded.

Our borderline cases range in I.Q. from .70 to .86 inclusive. The median I.Q. is .78. The manner in which these overlap the two neighboring groups may be seen by referring to Fig. 3. The numerical distribution is given in Table III. It is significant that we have not found a single individual testing below .70 (and only one case at .70) who could be classified as other than feeble-minded. The number rapidly diminishes below .75, and we have thus far been perfectly safe in using .75 as our tentative upper limit for the lower group. Cases testing between .70 and .75 are the most difficult of all our cases to classify. It probably is of little consequence, within this short range, which of the two classifications is given.

TABLE III. BORDERLINE GROUP. DISTRIBUTION OF INTELLIGENCE QUOTIENTS.

I.Q.	CASES	I.Q.	CASES
.70	1	.79	14
.71	2	.80	13
.72	1	.81	13
.73	5	.82	13
.74	8	.83	3
.75	12	.84	1
.76	10	.85	0
.77	22	.86	1
.78 (median)	9	Total	128

The final decision, of course, must be made upon the basis of social fitness. Whether this (whatever it may be) resembles intelligence in the tendency of continuous variation is not easily demonstrated, for at present we are neither able to define nor to measure this capacity in objective terms. If we agree, however, that there is probably a high correlation between the mental level and capacity for social fitness, so that we are willing to classify persons as "normal" or "feeble-minded" upon the basis of our combined observations of the one and measurements of the other, we cannot consistently draw a sharp line of demarcation between the two groups resulting from this classification. If there are slightly varying degrees of the one, the same must hold true for the other.

Let us suppose the correlation between the I.Q. and social fitness to be perfect—i. e., 1.00. Then the I.Q.'s .95, .80, .75 and .60 would imply social fitness ratings of 95 per cent, 80 per cent, 75 per cent and 60 per cent, respectively. If the individuals A, B, C, and D possessed these levels, respectively, we could say that A is an average-normal, and that D is feeble-minded. But we cannot reasonably apply either of these terms in the case of B and C. It would be no nearer correct to say that B's social fitness is average-normal than to say that he has average-normal intelligence, thus placing him in a class with A, although 15 per cent A's inferior in that respect. Similarly, we would be prevented from classifying C as socially feeble-minded.

That the correlation between the I.Q. and probable social capacity is not perfect may be seen in the great amount of overlapping of groups in Fig. 3. There is, however, a general positive correlation. Persons who have relatively high I.Q.'s also stand relatively high in our judgment of social fitness. Those who are feeble-minded psychologically are, for the most part, also feeble-minded socially. Thus we have a general, but not an absolute, social gradation. For this reason two intermediate groups have been formed for placing individuals who cannot be considered either normal or feeble-minded. The lowest of those who fall in this intermediate space are described as being of borderline intelligence. The borderline group is separated from the next higher group in the same way in which we distinguish borderline cases from those whom we consider definitely feeble-minded.

It is generally agreed that there is a real need for descriptive terms for those who fall between the average-normal and feeble-minded levels. Witmer (69) says "there will always be large numbers of children in the border zone between the socially feeble-minded child, and the socially normal child, and with such children the refinement of clinical methods and the application of intensive observation and training will furnish us with psychological data which will enable us to arrive at a secure social classification." Dr. Witmer implies, however, that these improved clinical methods will enable us to place such children in either the normal or the feeble-minded group.

Haines (28) found 20 per cent of his delinquent boys to be "doubtful" cases, all others admitting of easy classification. He suggests (p. 108) in regard to the "doubtful" cases that the future history of these boys may reveal whether they should be rated as normal or feeble-minded. Pintner (46) finds 21 per cent of his delinquent children apparently neither normal nor feeble-minded.

These he leaves in an intermediate group, to which he gives the name "backward". This group seems to conform in its meaning very closely to our two intermediate groups, "borderline" and "dull-normal".

Kohs (36) has given careful consideration to the question of the borderline case and points out valuable details of psychological and social diagnosis by which he applies "feeble-minded" and "normal" to individual cases. It is unfortunate that he should assume that all of his "borderline" cases are definitely either normal or feeble-minded. He says: "In summarizing our data we find, as one would expect, no distinct line which marks off the normal from the feeble-minded. The mental ages of one group overlap those of the other. We find normality to range within the limits of 12.2 and 10.4 (mental ages by Goddard's Revision), and feeble-mindedness not to extend above the limit 11.2". This overlapping is quite similar to our findings with reference to distinctions between the intelligence groups. The method of diagnosis was similar also, as he reports that final judgments were based upon "the Binet and other tests, as well as information gleaned from the personal-industrial-sociological-family history."

Of Kohs' 335 cases, all of whom were between the ages of 17 and 21, 35 per cent classified as normal and 65 per cent as feeble-minded. The highest 52 cases of the feeble-minded group, and the lowest 48 cases of the normal group (100 in all) he considers "borderline cases"; i. e. those in which "other means must be utilized in order to come to a definite conclusion regarding mental conditions". It would seem better if instead of attempting to make his definition of "normality" and "feeble-mindedness" fit all of these cases, he had left these 100 intermediate cases classified as "borderline". His results would then be approximately as follows:

Definitely feeble-minded	50 per cent.
Borderline	27 per cent.
Normal	23 per cent.

Huey (34, p. 168) at the conclusion of his splendid descriptive study of high grade feeble-minded and borderline cases says: "It is evident from the studies that the high grade feeble-minded fall naturally into certain groups; and from these groups I am convinced that one may pass by imperceptible gradations into corresponding classes of non-feeble-minded persons, normal and abnormal". This view corresponds more nearly with the opinions resulting from the study of delinquent boys in the present discussion. "Borderline" designates here a certain grade of intelligence, which is just as nearly definite as feeble-mindedness, or any other of the overlapping grades.

Social and industrial significance. Borderline intelligence, for purposes of social diagnosis, differs from feeble-mindedness only in the fact that individuals classified in this slightly higher group cannot be said to be absolutely unable to "compete on equal terms with their fellows" or to "manage themselves and their affairs with ordinary prudence". At the same time, it cannot be said of these persons that they **are** able to perform these social functions as well as can be expected of average-normals.

The following descriptions are taken from the historical and observational records of two boys of the same age, 16 years. They have not been specially selected, and each represents fairly well the boys in the school who are of about the same level of intelligence.

A. Average-Normal. Age 16; I.Q. .94	B. Feeble-Minded. Age 16; I.Q. .59.
1. Quick to learn. Takes up new suggestions very easily.	1. Learns slowly, if ever. Seldom has a new idea.
2. Enjoys working with tools.	2. Cannot understand work with tools, except what he has learned with much practice.
3. Inventive. Always trying to devise new ways in which to go about his daily work.	3. Acts only through habit. Never tries to save his steps, or to find novel ways.
4. Polite, quick. Enters readily into conversation.	4. Sullen. Slow. Will walk away rather than enter into conversation.
5. Reached first year of high school.	5. Reached third grade, elementary school.
6. Selects books of adventure or of mechanical construction.	6. Selects picture books.

The relative superiority of A over B is shown at each of the points given. These degrees of difference between average-normal and feeble-minded children are even more obvious to the trained or experienced person than the foregoing brief comparison shows. Further the points given here are but a few of many qualities in which individuals of these groups show important differences by which we can easily distinguish between them.

But it is not surprising that A and B should differ so widely in their social qualities when we note the equally wide difference in the I.Q. What of the 35 intermediate degrees of intelligence? The following description, using the same points for comparison, will serve, in a sense, as a reply to this question:

C. Borderline.
Age 16. I.Q. .82.

1. Learns slowly, but does not easily give up. Does not upon his own initiative take up new suggestions for constructive work, but can follow plans set by others.
2. Enjoys working with his own tools (drawing instruments). Not likely to be interested in others.
3. Not inventive, but often shifts his methods of procedure: i. e. has more than one way in which to do his work.
4. Neither positively polite nor positively impolite. Will converse, but is not likely to start a conversation.
5. Reached fourth grade, elementary school.
6. Selects easy story books.

In the writer's opinion, C represents a level of intelligence which is no less definite than either A or B. As in the case of A and B, a more extended list of traits would show many others which are similarly comparable. Those given here are sufficiently representative for our purpose.

It will be at once evident that we cannot apply to C either of the terms "feeble-minded" or "normal" as in the cases previously described. Some persons might attempt to compromise by saying that C is "feeble-minded along some lines, and normal in others"—an expression not infrequently used as an apologetic explanation for the failure of children to successfully compete with their classmates. While there are doubtless cases where this is true, it cannot apply to the great majority of delinquent boys of whom C is a fair representative. It would be wholly unjustified in the light of the data given for this case. Although there are certain specific ways in which C resembles B more closely than he resembles A, and other specific ways in which he resembles A more closely than he resembles B, there are no indications of a **general direction** in which his capacity is approximately equal to that of either. And as for the **general level** of his intellectual and social capacity, there can be no doubt that he classifies somewhere between A and B. It is only this general level of capacity to which we refer in classifying him as a borderline case.

In training a boy of borderline intelligence for industrial work, it is necessary to bear in mind his relative superiority to feeble-minded boys, and at the same time his relative inferiority to those of average normal intelligence. One trade instructor, who has been unusually successful in grading his various tasks to correspond to the different levels of intelligence, finds that borderline cases, on the whole, show just such an intermediate level of capacity. Several boys of borderline intelligence have become good press-feeders, but never yet has he found a boy whose I.Q. is less than .72 who can successfully perform that work. At the same time, most of those whose I.Q.'s are .90 or above much prefer type-setting to press-feeding, and are usually unwilling to remain long in the latter work. It is necessary, of course, for every boy being trained in the printing trade to pass through the several stages and thus become familiar with all, even though his interests and ability cause him to be more proficient in one task. Type-setting ability, according to this instructor, is rarely found in boys of I.Q.'s much below .90. There have been but few feeble-minded boys tried out in this trade department, but it is found in those few cases that press feeding is too difficult and requires a degree of attention which boys below .70 cannot give. There is much in the way of cleaning, folding, etc., however, that can be done by boys of this grade, under competent supervision.

Thus we have in one trade, three lines of work, equally important for the trade as a whole, and yet each adapted best, both by the capacity required and the interest aroused, to a single intelligence group. Further study of this and other trades will doubtless reveal possibilities for even more definite gradation. The important point for the present discussion is that industrial teachers find a close relation between the ability of these young men and intelligence groups into which the tests indicate that they belong; and that these teachers find a general gradation of industrial capacity, in which such terms as ‘‘feeble-minded’’, ‘‘average-normal’’ and ‘‘borderline’’ can be used with a commonly understood meaning.

At this point it becomes necessary to emphasize one way in which we disagree with the generally accepted tendency to consider young adults ‘‘normal’’ purely upon the basis of apparent social and industrial success. We cannot agree, for example, that a boy whose I.Q. is 72, who becomes trained to such an extent that he can be said to be ‘‘successful’’ in his work, is therefore (ipso facto) normal. Let us suppose that the trade in which he is successfully competing is that of press-feeder. In the light of our observations with the printing instructor referred to, we would not feel justified in placing him in any higher group than that of borderline intelligence. He would not, of course, come within our meaning of ‘‘feeble-minded’’. Our belief is based upon facts concerning several of our borderline cases who overlap the feeble-minded group in the distribution shown in Fig. 3. There is need for much revision of opinion with reference to the meaning of industrial normality.

Borderlinity and conduct. There is probably a positive correlation between intelligence and social behavior, although this also is difficult to determine because of the lack of method for measuring the latter. Terman (54) finds normal and superior children better behaved in school than those who are backward. The intellectual inferiority of delinquents, as a whole, also suggests a close relation between conduct and intelligence. The different degrees of conduct are even more difficult to determine and decide than are the degrees of capacity in industrial tasks. That there are degrees of conduct, however, can hardly be disputed. There is probably a level of social behavior for each of several age periods which occurs with sufficient frequency to be considered normal or average for that period. If such is the case, we may reasonably expect children to react morally in direct ratio to their intelligence. There are many exceptions, of course, evidenced by the fact that some delinquents are of superior intelligence, and that some feeble-minded children are well-behaved.

This is because morality depends only in part upon intelligence. Just what this part may be we have no means at present for determining. We may venture the opinion that it is a more important part than casual observation leads one to believe.

In the absence of correlation data, it must be assumed that in general the degree of moral responsibility of delinquents of borderline intelligence lies somewhere between that of the feeble-minded on the one hand and average-normal persons (of the same age) on the other. How this applies with reference to specific offenses will be discussed in another chapter.

Probable development. Many of our borderline cases have already become physiological mature, and in these cases we cannot reasonably expect that intelligence will develop much above the present level. The careers of these young adults have been followed for three years, and nearly all have done as well as the probabilities indicated at the time of the diagnosis. Some have committed new offenses and are now in other institutions. None of those classified as borderline has yet become normal by any criterion. Almost without exception there has been difficulty in getting adjusted to the practical conditions of life. In this difficulty and in the subsequent trials and failures, inferior intelligence has been a dominant factor.

In the younger cases there has not been an opportunity to apply the social and industrial test. Repeated intelligence tests, however, showing the stability of the I.Q. have been convincing. Our borderline cases have thus far remained borderline. Their I.Q.'s have remained sufficiently constant to warrant the conclusion that they will continue to be borderline cases at least up to maturity. It is unreasonable to suppose that any miraculous change will take place thereafter.

The training and guidance of borderline cases is a matter of grave importance. It is, of course, unfair, undesirable and impossible to segregate them with the feeble-minded. It is unfair because they are not of the grade of intelligence for which institutions are intended. It is undesirable because no institution is properly equipped for these high grade cases. It is impossible because there are already enough idiots, imbeciles and morons, leaving borderline cases entirely out of account, to fill all of the existing institutions many times over. It would be impracticable to provide institutions for borderline cases until the feeble-minded have been cared for.

At the same time it is equally impracticable to turn out persons of borderline intelligence from our schools upon the supposition that, because they have not been classified as feeble-minded, they will meet with normal success. Without adequate training, a young man bordering on mental deficiency is hardly better prepared to face the responsibilities of life than a high grade moron. There are, to be sure, some instances in which boys of this (borderline) grade have become decidedly superior to others of the same I.Q. by continued application, this very superiority being the basis for our classification. The average delinquent boy, however, whose I.Q. lies between .70 and .80 is much more dependent upon what he has been trained to do than upon his ability to adapt himself to new conditions.

The influence of heredity. It is unfortunate that space is not available in this study for the presenting of a large number of family charts of borderline cases. It is expected that these will be discussed in a later paper. The characteristic feature of most of these families is the appearance of many variations of traits. In the family of B-114 (Fig. 18) for example, we find immorality, excitability, alcoholism, normality, feeble-mindedness (probable), paralysis, etc., occurring in three generations. Some of these traits, of course, are not hereditary. That they are due, in part at least, to the transmission of defective germ-plasm is not an illogical conclusion. It is not surprising that this combination of traits should result in the production of inferior, but not defective, mentality.

In the family of B-63 (Fig. 17) we find more normality, the propositus being the last of several children most of whom are normal, but of a feeble-minded father. This is what might be expected in the light of the Mendelian laws. One feeble-minded and one normal (duplex) parent will produce normal, but simplex, children. In this case we may assume that the mother is duplex. Four of the children have already been found normal, but whether or not they are simplex cannot be told until another generation (or two) has been produced. The normality of the fifth child has been questioned, and the seventh (B-63) is a borderline case by our criteria. These two cases may be safely considered variations from the Mendelian probability.

In the families of most of our borderline delinquents, feeble-mindedness occurs with sufficient frequency to warrant the belief that if borderline intelligence represents a variation, it is probably a plus variation from feeble-mindedness rather than a minus variation from normality. This cannot be determined with certainty from our data, inasmuch as both normality and feeble-mindedness occur among the relatives.

It is not probable that the study of the families of borderline delinquents will give all the data necessary for learning the mechanism of the inheritance of borderlinity. From our own data we are convinced that most of our borderline youths are carriers of germ-plasm which produce disgenic results in wholly uncontrolled matings. Being capable of profiting from education, some may be instructed to advantage in the principles of eugenics. The control of borderline matings, however, is secondary to the prevention of definite mental deficiency through the limitation of offspring among the feeble-minded.

CASE B-1.

Test results. Age 17-2. Mental age 11-1. I.Q. .70. Borderline. Among the successes in year XII and above are fables (barely 12 year performance), abstractions (barely passed), president and king, abstract pairs (year XVI. Barely passed). Failed (utterly) on designs and form-board (year X). Makes change, gives rhymes, passes reading test, etc., in which many of this I.Q. fail.

Observations. Slow, dull, but co-operative and pleasant. Is reliable and can work on independent jobs with a fair degree of success. Works well in school, much better and with more sincerity and real effort than do most boys of his age and I.Q. Would not be selected as feeble-minded by most (even trained) observers because of his adaptability, which, though obviously not average for his age, is better than that which characterizes most of the high-grade feeble-minded. Physically weak. Much interested in music and has responded well to training in that line.

Delinquency. Stealing, truancy, dependency. Ran away from school and from several homes in which he had been placed as an orphan. Also from detention home of juvenile court. Principal offense, ran away and stole a bicycle.

Personal history. Early developmental history unknown. Has been in institutions since infancy, but no records available. Has run away from several different homes, but has never attempted to leave the State School without permission. Has been found responsible, can be trusted to go back and forth to neighboring cities unaccompanied and with assurance of good conduct and no mishap (which can be said of very few of the feeble-minded group). Capable of about 6th grade work in school, but cannot go much beyond. Reads, writes good letters, and makes friends easily.

Family history. No data. Both parents dead. Boy has been an orphan since early childhood. Probably no fraternity.

Conclusions. Three years' observation in this case have led to the belief that he is not sufficiently inferior in social and industrial adaptability to be classed with those whom we have designated as feeble-minded. Although the low test indicates that he will probably not develop above the 12 year level, we feel safe in concluding that he can manage himself and his affairs with sufficient prudence to keep him out of public institutions. Time alone, with continued observations, will tell of the worth of this estimate.

CASE B-6.

Test results. Age 15-3. Mental age 11-2. I.Q. .73. Borderline. Passed: similarities (XII), clock (XIV), boxes (XVI.) Failed on date (did not know within three months), designs (X) ball and field (score 2), fables (1 out of 5) and practically no successes beyond. From the tests alone we could hardly escape classifying this case as feeble-minded.

Observations. Inclined to be dull, lazy, inattentive and careless. Does not like to study. Sullen and not responsive in school. In industrial work, however, takes more interest and can do routine work (press-feeding) very well, earning a satisfactory wage while under direction. Does not think out for himself such matters as securing work, buying clothes, etc. but depends upon relatives and (while on parole) State School officials. In good physical condition.

Delinquency. Stealing bicycles. Placed in detention home, ran away and again stole two bicycles.

Personal history. Has always been sullen and disinterested in school work. Especially troubled by arithmetic. Reached fifth grade, apparently unable to go farther. Irregular in attendance. At the age of about 13 began to run with a crowd of vicious boys, chosing these rather than better ones who were available for companions. Offenses apparently committed while alone; no record of group delinquency. Committed to State School at 15. Responded well to supervision, but subject to spells of stubbornness and viciousness. Successful on parole, but caution taken to keep him under the direction of other persons. Now in training for military service.

Family history. Father normal. Mother immoral, probably feeble-minded. One brother, dull-normal, in home for dependents. Mother's family, ignorant, low grade people, probably much feeble-mindedness among them.

Conclusions. It is unfortunate that all of the data cannot be given upon which our conclusions are based. After three years of observation and careful checking up with reports of other observers, it is evident that B-6 is practically feeble-minded with reference to mental reactions, but sufficiently able to adapt himself to industrial conditions (not to independent work) to justify our classification in this next higher group. None of those who have had him in charge would risk placing him entirely upon his own responsibility.

CASE B-7.

Test results. Age 15-3. Mental age 11-1. I.Q. .73. Borderline. Basal year IX. Successes above year XII, problems of fact, clock problems. Fables entirely missed. Typical interpretation: "That they ought not to ride on the poor donkey." Gave but 51 words in 3 minutes, no logical association. Ball and field barely score 2.

Observations. Nervous temperament, physically undersize, inclined to be lazy. Appears bright, would pass for normal. Responsive to authority, cooperative, gives practically no trouble in discipline. Uses good language. Somewhat timid. Cannot do entirely independent work, but seems more capable of adapting himself than do most of those classified as feeble-minded.

Delinquency. Immorality, truancy, vagrancy, incorrigibility. Had lewd habits, habitually ran away from home and school, staying out nights and "bumming"; beyond control of father.

Personal history. Mother deserted him at age of 2 years, leaving him with an aunt. At about 8 years of age became unruly, began to play truant, and ran with bad companions. Father took him back and placed him with different relatives for short periods, but none could manage him. Reached sixth grade in school at age of 14. Committed to State School at 15.

Family history. Father normal, mother feeble-minded and immoral. Several cases of feeble-mindedness on father's side. Boy has two sisters, both self-supporting.

Conclusions. While industrially more capable than his I.Q. would indicate, his poor comprehension of moral situations, both in the tests and in everyday life suggest intelligence bordering on mental defficiency. Tests show all-round retardation. Probably will not develop above 12 year level, and while perhaps not strictly an institution case, ought to be under supervision at least until he has physically matured.

CASE B-14.

Test results. Age 16-3. Mental age 11-9. I.Q. .74. Borderline. Among the failures are: designs (X), form-board (Healy A, year X), six digits (X), dissected sentences (XII), and similarities (XII). Vocabulary 40, (12 year performance). Passed fables, president and king, problems of fact. Noticeably weak in reducing situations to terms of his own expression.

Observations. Dull, slow, phlegmatic. Appears normal, would probably pass for such in any ordinary locality. Does not seem interested in his vocational or moral future, shows little concern about such things. In good physical condition.

Delinquency. Burglary, stealing, truancy, dependency. Broke into a garage, stole motorcycle. Also stole newspapers. Habitually ran away from relatives with whom placed at death of parents.

Personal history. Parents died when boy was 2 years of age. Left with various relatives and friends with whom he never got along. Refused to go to school after sixth grade. Had difficulty with arithmetic especially. Committed to State School at 15, after being tried in private institutions. Responded well, never considered normal, but more capable than any yet classified as mentally deficient. Now working as a mechanical assistant doing odd jobs under supervision.

Family history. Nothing known of parents. Relatives with whom placed did not provide good home. Foster mother was probably a drug addict. To these conditions probably much of his delinquent conduct may properly be ascribed.

Conclusions. Obviously of inferior intelligence, taking everything into consideration. While irregularity in school, unfavorable home, etc., may account in part for social failure, his low test level cannot be thus explained. His industrial record places him somewhere between feeble-mindedness and normality, and in view of test results we may safely conclude that he is nearer the lower group.

CASE B-54.

Test results. Age 16-11. Mental age 12-4. I.Q. .77. Borderline. Passed but 2 tests (fact, XIV, boxes, XVI) above 12 year level although carried through adult tests. Vocabulary level about 12 years. Wide range test given.

Observations. Seems childish in many ways, and yet has done some remarkably good work when properly directed. Mother thinks he is mentally deficient. Takes much interest in mechanical work. Cannot plan satisfactorily and has periods of depression during which he seems incapable. His instructor says he is suspicious, conceited, and by no means an all-round normal.

Delinquency. Burglary, larceny (details not reported) truancy. Ran away from a private institution, and habitually from home and school.

Personal history. Mother says he has always been lazy and childish. Likes to play by himself. "Is happy for hours at a time just driving nails into a board and pulling them out". Was of a roving disposition, probably inherent. Committed to State School at 15 years of age, after being tried without success elsewhere. While here took up mechanical work and made progress. Now discharged, working under direction, making a living wage.

Family history. Much excitability and nervousness in family. Other members apparently about normal. Brothers and sisters have become self-supporting, this boy being the only one to fail. Father, a gambler, immoral. Mother refined, temperamentally calm, normal. No other institution cases reported.

Conclusions. Observations and historical data lead to the belief that the tests have given a true picture of the mental level. Surely will not develop above 13 year level and yet, barring the results of emotional outbursts, will probably succeed as a third class mechanic. It is significant that his (mechanical) instructors do not consider him normal.

CASE B-56.

Test results. Age 17-11. Mental age 12-5. I.Q. .77. Borderline. Passed abstract pairs (XVI), arithmetic (XIV), clock (XIV), but failed on all other tests above XII. Vocabulary 12 year performance. Wide-range test given, carried through to superior adult level.

Observations. Phlegmatic, slow, deliberate. Tried his best in the tests. Works well under direction, seldom gives trouble, seems conscientious, but obviously inferior mentally, to ordinary boys of the same age. Is certainly far from being an adult intellectually. Interested in his work if laid out for him. Cannot plan much ahead of routine work. Is kind, polite and likable.

Delinquency. Dependency, forgery. Inadequate home. Placed in institution for better surroundings, forged a check while on leave and returned.

Personal history. Committed to State School at 17 years of age. Had reached eighth grade in country school, but not capable of better than sixth grade work. Took up carpentry, learned to do heavier work well, but not capable of independent direction. His characteristic sincerity made this practical test of great value.

Family history. Parents probably not defective, but incapable of providing satisfactory conditions for this boy, their oldest child. No other public charges reported.

Conclusions. Not likely to develop much above present level, surely not above 13. We expect him to continue at the same steady gait which has characterized his work for the past few years and to keep out of trouble, unless too much is expected of him by way of self direction. The following letter indicates his point of view. "I thank the School for the way they have treated me as ever remembering Whittier State School for It good teachings and learning they have given me".

CASE B-58.

Test results. Age 18-7. Mental age 12-4. I.Q. .77. Borderline. Successes above XII: 7 digits (XIV), clock (XIV). Significant failures: fables (XII, score 0), similarities (XII), arithmetic (XIV). Vocabulary index 34, about 11 year performance.

Observations. Cooperated excellently in tests, and we are assured of representative results. Calm, deliberate, quiet, fine appearing, neat; good physical condition. Works so well under direction that his instructors admit their former tendency to overestimate his intelligence.

Delinquency. Burglary, stealing. Broke into a garage. Other charges of miscellaneous thefts. Rode away with another boy in a stolen machine.

Personal history. Reached fifth grade in school, left to become garage assistant earning $14.00 per week. Had used tobacco and liquor since 14 years of age. Ran with bad companions. Has always been the tool of other persons, which fact probably explains most of his delinquency. Committed to the school at 18 years of age, after repeated probation. Since discharge has again weakened, now in a penal institution for larceny.

Family history. Father normal, a successful mechanic. Mother now dead, probably normal. Older brother in an eastern reformatory. Other children apparently keep out of trouble.

Conclusions. Characteristic weakness, susceptibility to influence, inability to manage himself, etc., undoubtedly due to inferior intelligence. Yet is certainly not feeble-minded within the usual meaning of that term. Probable limit of development, not much above level at time of test.

CASE B-63.

Test results. Age 12-5. Mental age 9-8. I.Q. .78. Borderline. Failures: date (IX), (did not know month or year), reading (X), designs (X), word-naming (X, gave 51), fables (XII, score 0. Note: (a) "How to drive horses." (b) "Foolish thinks". (d) "About killing things", etc.

Observations. Nervous, restless, not (apparently) wilfully disobedient, tries to do his best. Physically weak and undersize. Likes to be out of doors. Greatly interested in tests. Fond of animals.

Delinquency. Stealing, truancy. Stole small articles from home and school. Habitual truant. Incorrigible at times. Ran away with a crowd of low-grade boys.

Personal history. Attended school (irregularly) for six years. At the end of that time, the principal states, he was barely prepared for third grade. Began associating with bad boys in neighborhood when about 8 years of age. Parents lay delinquency to this influence. Would often stay out until nearly midnight. Never stayed out over night. Committed at 12 years of age after all other plans had failed. Responded well at State School. Physician reported trace of inherited syphilis, recommended fresh air and removal of tonsils and adenoids. This treatment improved his conduct and he has given no serious trouble. Too young for industrial work, still in school.

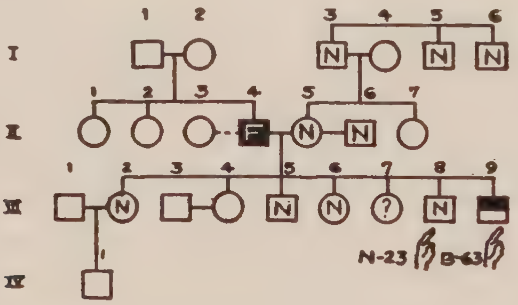

Fig. 17. Family of B-63 and N-23.

Family history. Father feeble-minded, shiftless, alcoholic, morally loose (See chart, Fig. 17). Deserted family, now living with another woman. Mother normal, refined, foreign born. Married this man because ignorant of morals in this country, regretted it later. Now divorced and remarried. Home conditions formerly bad, family now removed to better district. Other children normal, one sister may be inferior.

Conclusions. A retardation of nearly two years at this age means almost certain continued retardation. B-63 may be potentially feeble-minded but we have not yet sufficient evidence to warrant that classification. Probably will not develop much beyond 12 year level.

CASE B-67.

Test results. Age 15-9. Mental age 12-3. I.Q. .78. Borderline. Successes above XII: 7 digits (XIV), induction (XIV). Failures: form-board (X, Healy A), similarities (XII), arithmetic (XIV), fact (XIV), clock (XIV). Vocabulary index 42, about 12 year performance.

Observations. Appears bright, but does not adapt himself to other persons. Gives up tasks before completing them. Cannot concentrate well, has difficulty in carrying practical problems through to a conclusion. Would pass for an inferior normal in most communities.

Delinquency. Immorality, burglary, truancy, stealing. Lewd habits, immoral relations. Broke into a barn, stole two horses. Later took several motorcycles. Habitually ran away from home and school.

Personal history. Attended school 8 years, reached eighth grade. Unable to complete. Left school, became delivery boy at $12.00 a week. Delinquency began at about 13. Committed to State School at 15. Did well under school supervision but failed several times when tried for parole. At time of this writing is being held for another (Sx) offense.

Family history. Have traced this family through 5 generations, 169 individuals recorded. Father normal, but immoral. Mother weak, probably borderline case. Other members vary between normal and very inferior, few can be considered feeble-minded. One brother in a state prison, another in State School. Father barely escaped conviction for stealing. Home conditions not favorable (index 10).

Conclusions. In view of the fact that he has not yet (now 18 years of age) shown normal social stability, and that he has not succeeded when placed upon his own responsibility, we feel safe in concluding that the test results constitute a fair index of his social capacity. Needs supervision, not so much as do those testing below .70, but enough direction to keep him from the necessity of competing with normal individuals. Unless this is provided, it is evident that he may at any time drift into trouble. Mental age at maturity probably not above 13 years.

CASE B-114.

Test results. Age 13-11. Mental age 11-4. I.Q. .82. Borderline. Successes above II: fact (XIV), clock (XIV). Significant failures: report (X, 7 errors, took 45 sec.), comprehension (X, 1 of 3), ball and field (XII score 2), fables (XII, score ½), pictures (XII 1 of 4).

Observations. Not in good health when entered. Nervous, restless, slovenly in appearance, gives little attention to personal needs. Conduct is good when under supervision and kept busy.

Delinquency. Vagrancy, stealing, truancy. Stole money and several articles from neighbors, ran away to another city. Repeatedly returned home (by officers) and ran away. Habitual truant from school. Lived with tramps part of the time.

Personal history. Attended school until 12 years of age, reached fifth grade. Then began to be irregular, could not progress farther. From 12 to 13, committed many offenses, as recorded above. Reported to have syphilis, probably acquired. Committed to State School at 13 years as last resort. Here improved much in conduct by reason of supervision not previously given him. Now at home earning $2.00 a day.

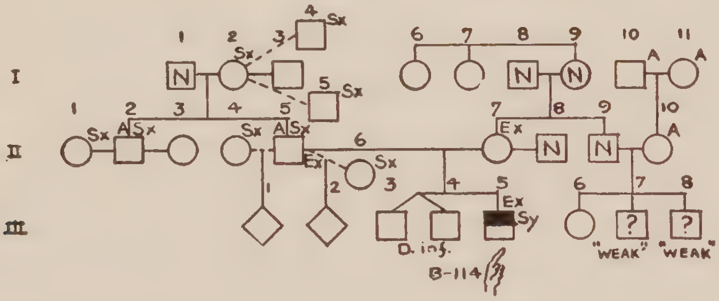

Fig. 18. Family of B-114.

Family history. Much excitability and irregular moral conduct. (See chart, Fig. 18). Father immoral, abusive to wife, alcoholic. Deserted family and lived with several prostitutes who had children by him. Mother is excitable, nearly hysterical since boy became delinquent. Is either of low intelligence or ignorant. Parents now divorced. Two other children, twins, died in infancy. Paralysis, dropsy and tuberculosis in family. No institutional cases other than B-114 reported.

Conclusions. It may be suspected that B-114 is psychopathic (i.e. undergoing mental deterioration). This would seem plausible from the traits evidenced in the family chart. Our data indicate, however, that he has always been slow, dull and somewhat stupid. We cannot escape the belief that he is permanently retarded, and that he cannot develop much above the 13 year level.

CHAPTER IV. THE DULL-NORMAL GROUP.

(20.6 per cent of the 470 cases)

Extent and meaning. We have classified 97 boys as being of dull-normal intelligence. The I.Q's of this group range from .80 to .93, overlapping the neighboring group at either end. The median I.Q. is .86. It may be seen in Fig. 3 that the highest I.Q. of the borderline group (.86) is higher than the lowest of average-normal group (.84) and thus if we were to use the test results as the sole basis of classification, and allow the extreme I.Q's to represent the limits of each group, there would be no place for the group now under discussion. That there is need for such a classification among our cases is evident from the results of observations regarding social and industrial efficiency.

The term "dull-normal" is used by Terman (54, p. 92) to describe "those children who could not, according to any of the commonly accepted standards, be considered feeble-minded, but who are nevertheless far enough below the actual level of intelligence among races of European descent that they cannot make ordinary school progress or master other intellectual difficulties which average children are equal to". In Dr. Terman's experience "A few of this class test as low as .75 to .80 I.Q., and the majority are not far from .85." He points out that dull-normals will usually reach the eighth grade, but only by slow promotion. It is estimated that this grade of intelligence is common to 15 per cent of the school population. Thus the problem of the dull-normal reaches nearly as large proportions in the public school as in the institution for delinquents.

When clinical methods were first applied to the study of school children, many of the dull-normal class were thought to be but temporarily retarded. To these the term "backward" was applied. The discovery, at about the same time, of adenoids, enlarged tonsils and other remediable physical defects in backward children led to desirable development of medical inspection and compulsory physical attention. But no sooner had this work begun than reports were widely circulated referring to marked mental development among school children resulting from the removal of adenoids, repairing of defective teeth, etc. It became generally believed that any backwardness not known to be definite feeble-mindedness must be due to some removable cause. Even among so-called feeble-minded children it was thought there may be many who are only backward through lack of physical attention. Forbush[1], referring to Dr. G. G. Fernald's estimate (of 1905) that the number of mental defectives in America may reach 150,000, while institutions were at that time caring for less than 8,000, says: "How many of this one hundred and fifty thousand are merely backward or slow children who can be brought up to average or nearly so by special teaching in the day schools? How many are physically weak because of bad inheritance or malnutrition, or bad air in homes, or too little sleep or some other unhealthful condition and only seem to be mentally defective because ill?"

Health inspectors have generally agreed that much backwardness is due to removable causes, such as malnutrition, adenoids, defective vision, defective or neglected teeth, etc., all of which are found in greater proportions among retarded and dull pupils than among the school population as a whole. In fact, the removal of these difficulties has apparently resulted in marked improvement in the behavior of certain children, as reported in studies of individual cases[2]. The more pronounced cases of retardation are often attributed to other defects not so easily remedied, such as defective hearing, nervousness, etc.

Reasons given by teachers for retardation are also indicative of the widespread belief that backwardness is nearly always due to extrinsic causes. In a recent school survey the writer (reference 62) secured from the teachers a statement as to the "probable causes" of retardation among 509 pupils in the elementary schools. The following reasons, in order of frequency, were given:

Illness or physical defects	115 cases
Dullness	107 cases
Retarded mental development	103 cases
Poor home conditions	38 cases

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1. Forbush. The Coming Generation. N. Y. 1913. pp. 189-190.
2. Vide chiefly Psychological Clinic, Vols. I-V.

Inattention or lack of application	35 cases
Poor attendance (truancy)	34 cases
Immature	22 cases
Language difficulty	16 cases
Change of schools	14 cases
Entered too young	10 cases
Other causes (4 in all)	15 cases

This list shows the different ways in which "backwardness" is ordinarily explained by those who have to deal directly with the problem.

Most of our dull-normal boys have been classified by their teachers as "backward" in the same sense that the teachers who gave the foregoing probable causes used the term. Some of these cases, of course, were so exceptional in their conduct at school as to influence this designation. Like other children, many were in need of operations for physical defects, and many came from poor homes. But this is also true of our boys of other intelligence groups. The I.Q. alone is sufficient to explain the backwardness. We have no reason for any other conclusion that the "backwardness" in the great majority of cases was due to inferior intelligence.

It may be well to state at this point that "backwardness" in the loose sense in which it is commonly used does not imply any particular level of intelligence. Children of all intelligence groups from feebleminded to superior are found among those so classified[3]. This is especially true of delinquent boys. Habitual truancy, detention by the juvenile court, suspension from school, etc., all of which are common among these children of exceptional conduct, are factors which interfere with normal school progress. It is interesting to note, however, that many of our boys of the average-normal and superior groups have made normal, or in some cases, superior progress, as regards the grade reached, in spite of just such difficulties. This has not been true of many cases testing below .92.

The dull-normal group in this study includes boys who are slightly below the standard of average boys of the same age with regard to apparent social and industrial fitness. Practically all would pass in any community for normal, but ''slow, ''stupid'', or ''dull'' individuals, whose deficiency, designated by these terms, is not especially serious. In the printing trade, for example, it includes those who can set type, but who are slower, less reliable and more difficult to teach than average pupils. The instructor in tailoring reports that there are a number of boys who ''although of apparently average intelligence, spend more time than should be necessary for ordinary boys to learn points necessary to a well rounded knowledge of the trade''. Most of the cases so reported are found to come within our criteria for the dull-normal group. In school, boys of this class are likely to be the ''stragglers'' who usually fail to be promoted at least once in their elementary school course or who, if they do not fail of promotion, are ''continually at the bottom of the class''.

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[3] A report on a group of backward children examined and classified is given in the Psychological Clinic, IX-4, June, 1915, pp. 97-106. The following proportions were found. Feeble-minded, 32 per cent; borderline, 20 per cent; dull-normal, 22 per cent; normal and superior, 26 per cent.

The following are taken from teachers' reports on boys of our dull-normal group:

1. "Slow and sleepy. Very quiet. Reads poorly. Does best in arithmetic. Writes abominably with little interest in improvement". (I.Q. .81)
2. "Spends much time in dreaming and writing poetry. Consequently misses his work. Perfectly capable, but mind not on his lessons. Can do well when held down to it". (I.Q. .87)
3. "Infernally lazy Difficult to say what he could do. Very fond of history. Very poor speller. Average in arithmetic, but too lazy to apply himself". (I.Q. .83)

Although among delinquent boys it is not difficult to find some of higher intelligence who also failed to make satisfactory progress in school, and who exhibited signs of laziness, lack of interest, etc., it is evident from the foregoing statements of the teachers that the factor of intelligence must have been one of importance with these who have since been classified as dull-normal. The test results, expressed in the I.Q. seem to justify this explanation.

Social and industrial significance. Just as these dull-normals have been backward and slow with reference to their school work, they have, for the most part, been backward and slow in their attitude toward the social order and in their reactions to industrial work. Few of our cases testing in the vicinity of I.Q. .86 have managed themselves and their affairs without occasional stupid blunders or indications of inferiority which are not common among average persons of the same age and experience. We refer here, of course, to those who are old enough to have become employed. The kind of employment is one of the most important factors in the careers of these young men. There are many kinds of work which have been proven by our observations to be in some ways better suited to dull-normals than to most average-normal persons. In printing, tailoring, plumbing, carpentry, painting and nearly all of the mechanical trades there are opportunities for a dull-normal boy of stable emotions to become successful and even highly skilled, provided his special tasks **within the trade** have been correctly chosen. In fact this has been the history of so many dull-normals who have been paroled or discharged that their subnormality has been seriously questioned by instructors who at the outset had believed that the tests had accurately foretold the limit of development. Since we have yet to find enough of these successes among our .80-.90 cases to justify the conclusion that persons within these limits become socially and industrially equal to the average adult of common school education, we are hardly prepared to abolish the dull-normal classification. It is still descriptive of a large group of persons who are noticeably inferior to the average intelligence represented by their chronological age. Moreover, there is abundant evidence that our .80-.90's have not become industrially and socially equal to our .90-1.10's, and therefore cannot logically be placed in the same group with them.

Probable development. Whether dull-normal children will become average-normal adults can be told with certainty only by continued tests and observations through adult life. The stability of the I.Q., as previously pointed out, suggests that no such development is likely to take place. Our observations of industrial success, although meagre at present, lead to the same conclusion. If, however, dull-normal intelligence, as here classified, is retardation due primarily to removable causes, it would be expected that intelligence would develop normally after these supposed causes had been removed. Here again, there is no positive evidence that the correction of the defects and conditions commonly supposed to produce backwardness have resulted in any marked change in the rate of intellectual development[4]. It is probable that much of the reported "improvement" in cases treated for adenoids, tonsils, defective teeth, etc., must have been physical rather than mental. It is indisputable, however, that intelligence can operate with greater efficiency in a "sound body". Most of our retested cases have had surgical and dental treatment during the interval between the two tests, and have been brought into conditions which are certainly more favorable than those with which they have been associated; but however much improvement here may have been in general physical condition, nutrition, conduct, etc., the close agreement of the two I.Q.'s suggest little or no effect upon the development of intelligence. One boy who was diagnosed as feeble-minded (I.Q. .65) was treated for a number of defects which supposedly were to a large extent the cause of his low intelligence. A marked physical improvement followed the removal of adenoids, cleaning and straightening of teeth, etc., and there was every indication that the boy took on an improved attitude toward his work. A further test about one year after the first showed an I.Q. of .68. We may conclude that as far as can be determined by intelligence tests, there was not in this case any marked gain in mental growth. Diagnosed originally as feeble-minded, he is still feeble-minded. The gain of three points (which is of little importance) could be explained by the fact that children usually test a few points higher when examined the second time. His repeating of digits, interpretation of fables, and placing blocks in the form-board were of a level of performance no higher than in the previous test. We cannot, of course, attach any general significance to this individual case. It may be an exception to the rule. Since this boy was above 16 years of age, it may be that his intelligence had ceased to grow, that the operations were performed too late to be effective. It is interesting to note, however, that physicians, nurse and instructors had pronounced a ''marked improvement in general intelligence''.

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[4] i.e. as measured by a scale for determining mental age. Dr. J. E. W. Wallin undertook (in 1912) a study of improvement due to care of the teeth among retarded school children in the Cleveland (Ohio) schools. He found 50 per cent improvement, measured by tests of (1) visual memory, (2) verbal association, (3) addition, (4) opposites, and (5) the "A" test. Dr. Terman (Hygiene of School Child, pp. 179-80) remarks that "a serious defect of Dr. Wallin's study is that no 'control' group was tested. It is therefore impossible to say how much of the observed improvement was due to the improved adjustment of the later tests, how much to the added year of age, and how much to the dental treatment and mouth hygiene".

The influence of heredity. If normality is really a unit character in the Mendelian sense, it is not unreasonable to suppose that dull-normal intelligence is a variation from this character behaving in a way similar to borderline intelligence in relation to feeble-mindedness. These variations (so considered) are very numerous, and with other grades of intelligence are so distributed that, when the ratings of large numbers are viewed in the light of the normal distribution for continuously varying quantities it is difficult to think of any of these groups representing unit character. Further study of the problem of the inheritance of intelligence, in which the persons charted are classified according to our five social-intelligence groups[5] may contribute the desired information.

Most of the families of our dull-normal delinquents are made up almost entirely of persons of average or nearly average intelligence. Feeble-mindedness occurs much less often than in the families of borderline cases. Superior intelligence seldom occurs in either. Probably many more dull-normals occur in families of delinquents of that grade than we have yet found owing to lack of facilities for making tests and accurate observations. The latter, it is hoped, will be a development of the very near future.

Case studies. We here submit summarized descriptions of ten representative cases of dull-normal intelligence.

CASE D-2.

Test results. Age 16-0. Mental age 13-0. I.Q. .81. Dull-Normal. Passed all tests up to XII. Failures in XII: 5 reversed digits, pictures, similarities. Successes above XII: vocabulary (index 51), induction, president and king, fact, clock.

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[5] The practice of classifying persons as either "normal" or "feeble-minded" for purposes of making heredity charts makes the study of these variations impossible. It is admittedly difficult, however, to detect borderline and dull-normal cases without better observational methods than have been used at present.

Observations. Temperamentally phlegmatic, but slightly nervous physically. Does not make friends easily, but may be led by others into trouble. Works splendidly as second-class mechanic, and can be trusted to plan and carry out work with a reasonable (but inferior) degree of success. Does not "catch on" well in school, but is not seriously backward.

Delinquency. Larceny, burglary, stealing, truancy. Stole an automobile. Broke into several houses and committed petty thefts at the instigation of his father. Ran the streets at night, ran away from school.

Personal history. Born and raised in a small city. Attended school between 6 and 14 years of age, reached sixth grade, then left. Taken from parents at an early age. Lived with grandparents for many years, then taken by father who caused him to commit many offenses of burglary and stealing. Chose bad companions on whom he lays much of the blame for his delinquency. Committed to State School at 15.

Family history. Cousin of N-14. Family chart shows 58 persons, only one of whom (sister of D-2) is reported defective. Many known definitely to be normal. A few cases of immorality and excitability, but most of members are law-abiding, successful people. Mother a suicide, father alcoholic and criminally inclined. This branch of the family shows the most irregularity.

Conclusions. D-2 is now managing himself without special oversight and has held several factory positions with success. Has probably reached limit of development. Obviously not equal mentally to most ordinary boys of his age but is far from even bordering on social feeble-mindedness.

CASE D-3.

Test results. Age 16-1. Mental age 13-0. I.Q. .81. Dull-Normal. Successes and failures almost identical with those of D-2. Vocabulary index 48. Did better than D-2 on fables, but did not pass XVI performance.

Observations. Undersize, physically and temperamentally nervous. Subservient to authority. Is well liked by most of his instructors. Takes interest in his work, and can be trusted to carry out directions as well as most trained working boys of his age. We have watched this boy develop into a good routine carpenter.

Delinquency. Immorality, stealing. committed crime against nature. Stole several bicycles.

Personal history. Attended school up to sixth grade, which he reached at the age of 14. About that time he began to commit petty thefts. Placed in several private institutions in which he refused to stay. Returned to court repeatedly for small offenses. Committed to State School shortly after 14 years of age, after sex offense. Took interest in industrial training, made a good record. Was granted parole some time ago which he has not violated.

Family history. Little information available. Father a carpenter, probably normal. Propositus was only child.

Conclusions. Same as in previous case (D-2). We may expect this boy to work well at his trade, earn enough for a respectable living, and to manage himself properly. These are instances, in our opinion, of delinquency largely due to inadequate guidance.

CASE D-5.

Test results. Age 15-10. Mental age 13-0. I.Q. .82. Dull-Normal. Failed entirely on fables (score 0). Passed no tests above XIV. Vocabulary low, index only 38 (less than 12 year performance).

Observations. Physically weak. Very nervous, hysterical, easily excited. Has brief laughing spells, apparently without cause, which occur frequently while at work or play. One of these occurred during the examination. Works well, liked by his supervisors and instructors.

Delinquency. Burglary, stealing, incorrigibility. Broke into a store, stole several small articles. Beyond control of parents.

Personal history. Attended public schools for seven years, reached seventh grade, then expelled because of incorrigibility. Work had not been satisfactory during last year. Declared delinquent, placed on probation, reported regularly, but no sooner released than committed burglary and returned to court by parents. Entered State School at 15 years of age, responded well. Became second class baker in about two years. Returned from first parole because of another theft. Now on second parole, living with parents.

Family history. Family of German descent. Father cement worker, industrious. All members apparently normal. None other, so far as known, has become a public charge.

Conclusions. Has probably reached limit of development. Is bright enough to manage his affairs properly, although weakness of emotional control may interfere at times. This he should be able to overcome sufficiently well by experience and responsibility.

CASE D-21.

Test results. First test: Age 13-7. Mental age 11-5. I.Q. .84. Second test: Age 14-7. Mental age 11-7. I.Q. .80. Dull-Normal. Some comparative results of two tests: vocabulary (a) 27, (b) 28; fables (a) score 4, (b) score 4; form-board (a) failed after 4 min., (b) passed in 1 min. 20 sec.; word-naming (a) 98, (b) 72; other tests show similarity of results. Wide range test given.

Observations. Quick, nervous, extremely active. Talks and moves rapidly. Often involved in mischievious pranks. Unstable in work, but reported "abnormal" by all his instructors. Picks up instructions readily. Easily, but clumsily adaptable to new assignments.

Delinquency. Burglary, truancy. Habitual truant from school and often remained away from home at night. On one of these "nights out" broke into a store. Had been a ward of Juvenile Court for several years up to age of 13.

Personal history. An hereditary nomad. Has shown nomadic impulse from a very early age. Attended school up to third grade, then began to play truant. Afraid to return home after such an offense, would remain away for long periods. Had relatively good home (index 16), room of his own, etc., but these were of little attraction. Did not run with a "gang", but frequently took a single companion on his escapades. Ran away from detention homes and other institutions no fewer than twenty times before 14 years of age. Has recently taken on a more serious attitude, and become definitely interested in his life career.

Family history. The restlessness and consequent delinquency of this boy may be readily explained by hereditary nomadism, of which this family furnishes ample evidence.* The father, mother, both grandfathers and an older brother showed similar behavior in youth. All are apparently of normal intelligence.

Conclusions. In view of the similar results of the two tests one year apart, we have concluded that D-21 is nearing his intellectual maturity. His probable limit of development is estimated at 12 years. Should be capable of independent management and of doing approximately as well as the other nomadic members of the family have done.

CASE D-31.

Test results. Age 17-6. Mental age 13-5. I.Q. .84. Dull-Normal. Vocabulary 42 (about 12 year performance). Passed adult fables, boxes, clock, induction, president and king (3 points). Failed on all other tests above XII. All tests given X to XVIII inclusive. No markedly poor or absurd responses.

Observations. Physically weak and nervous. Goes about his work with apparent sincerity. Easily influenced by others, seems rather weak willed, but mentally normal. Instructors estimate his intelligence to be about average for his age.

Delinquency. Truancy, incorrigibility, dependency. Habitually ran away from school. Could not be controlled by mother who was moving about so much that it was almost impossible for her to exercise proper authority.

Personal history. Born in a small city in California where he lived up to time of commitment. Has always been of a roving disposition Attended public schools six years, reached fifth grade. Slow in school, reported by teachers to be lazy. Said to have been bright but progress retarded by changing often from one school to another. Committed to State School at 15. Here responded well, learned baker's trade, also took up music, became soloist on reed instrument. Returned from first parole on account of failure probably due to nervous instability. Now on second parole, in naval service, satisfactory.

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* The family chart has been reproduced in the writer's "Hereditary Nomadism and Delinquency" reference (64).

Family history. Several cases of nomadism and nervous diseases. Both parents now insane. Seven other children, two died young, two are excitable, others normal and not nervous.

Conclusions. D-31 has responded to industrial training with evidence of nearly average ability. He is not now entirely on his own responsibility and it may be some time before we will be able to judge the worth of our prognosis. If he repeats the history of other young adults of his age and I.Q. (and there is no reason for thinking that he will do otherwise) his level of intelligence is likely to remain between 13 and 14 years, which is sufficient for success in any one of several industries.

CASE D-45.

Test results. Age 13-2. Mental age 11-4. I.Q. .86. Dull-Normal. Passed all tests in IX and X, but none above XII, except 7 digits and boxes. Vocabulary about 10 year performance.

Observations. Slow, dull-appearing, phlegmatic. Responds well to kindly treatment. One would think that ordinary parental control would have prevented his delinquency.

Delinquency. Burglary, truancy, stealing, incorrigibility, larceny. List of appearances before juvenile court:

July 24, 1911. Unfit home, sent to orphanage. (age 8)
July 9, 1913. Stole $20 from mother. Placed on probation. (age 10)
Sept. 30, 1913. Burglary. Placed on probation. (age 10)
March 31, 1914. Burglary. Placed on probation. (age 10)
Sept. 22, 1914. Petit larceny. Placed on probation. (age 11)
Dec. 1, 1914. Violated probation, ran away from school. (age 11)
Dec. 29, 1914. Petit larceny. Committed to State School. (age 11)

Personal history. Attended public schools for six years, reached fifth grade. School retardation associated with repeated offenses. Was in special class for truants most of time. Ran with a crowd of thieving boys, for whose misconduct he was always the one to be punished. Responded to State School supervision, did not ever try to run away, although given maximum of privilege because of good conduct. Learned to work well under direction, but slow to become independent in his thinking. Now on parole, successful at gardening, making $10.00 per week and keep.

Family history. Father dead. Mother rather weak willed, probably inferior normal. Older brother about same grade of intelligence. Committed to another institution as delinquent.

Conclusions. We expect D-45 to develop to about 13 or 14 year level by the time he reaches physical maturity.

CASE D-51.

Test results. Age 20-3. Mental age 13-9. I.Q. .86. Dull-Normal. Passed all tests of XII and XIV except fact, president and king, arithmetic. Vocabulary index 52 (about 14 year performance).

Observations. Large, hardened appearing young man, physically strong, shows indications of dissipation. Tried his best in tests, and we are sure of a fairly representative performance. Does well at heavy work, good teamster, can manage himself properly and with independence on the farm. Rough and coarse in manner.

Delinquency. Drunkenness, larceny, highway robbery, vagrancy. Committed to another institution for drunkenness and using drugs, released and later charged with other offenses.

Personal history. Attended public schools 9 years, reached seventh grade. Left school to enter messenger service, when drinking and drug-using began. Tried in two other institutions, but repeatedly failed while on parole. Did well while under supervision, but invariably took to drug habit when released. Discharged at 21, has since been placed in another institution.

Family history. Parents divorced, father left family. Mother alcoholic. Three brothers, two sisters, apparently successful. No other institution cases reported.

Conclusions. Here is an example of a fully matured adult who tests between 13 and 14 year level. Has shown his ability so far as intelligence is concerned, to manage himself properly. The grip of the drug habit, however, prevents the normal exercise of his intelligence, and has led to many unsocial acts. Should be under supervision (for which he himself has asked) at least until habit is cured, otherwise he may continue to be an undesirable public charge at intervals and may commit some very serious offense.

CASE D-60.

Test results. Age 15-6. Mental age 13-5. I.Q. .87. Dull-Normal. Failed on absurdities (X), vocabulary, index only 38 (poorer than average 12 year performance), but passed clock, induction, fact, arithmetic (all three), boxes. Failed on all adult tests. Had seen code before, but made 5 errors.

Observations. Large, awkward, overgrown. Nervous. Emotionally weak, breaks down and cries on slight provocation. Has ability to work, but is unreliable because of temperamental variability. Often gets discouraged and leaves work, sometimes to its ruin. Has been responsible for much damage to machinery with which he was working. Not difficult to manage, but needs constant supervision to prevent trouble.

Delinquency. Immorality, forgery. At the age of 14 began to have immoral relations, became too interested in sex matters. Forged a check when 15.

Personal history. Attended public schools 8 years, reached seventh grade. Reported "backward mentally" by teachers, but never as feeble-minded, or even doubtfully normal. Sent to another institution at the age of 14, returned because of immorality. Committed to State School at 15. Here took up simple mechanical work, success in which was limited by emotional instability. Left to join navy, and while in service has been reported for breaches of discipline.

Family history. Propositus is only child. Parents were immigrants, became comfortably adjusted to American conditions. Father now owner of small clothing store. Neither parent above normal, possibly slightly below. Difficult to tell how much of apparent inferiority is due to ignorance. Father has rather low ideals, drinks, does not discourage his boy's wayward habits.

Conclusions. By this time (age 17) boy must have reached limit of development, probably not over 14 years at best. Will need supervision until he overcomes what is apparently adolescent instability.

CASE D-73.

Test results. Age 16-3. Mental age 14-1. I.Q. .88. Dull-Normal. Even performance. Months credit, by years: X, 12; XII, 21; XIV, 12; XVI, 10; XVIII, 6. Vocabulary, 43, about 12 year performance.

Observations. Has appearance of subnormal mentality, does better in tests than one would expect. Phlegmatic, lazy, has little ambition. Physician reports abnormal sex development.

Delinquency. Incorrigibility, immorality. Beyond control of parents, was developing very bad sex habits. Obscene, abused younger boys at school.

Personal history. Attended school 8 years, reached eighth grade. Intemperate at age of 10. Held several positions as delivery boy, also helped in stock room of large clothing store. Well thought of wherever he worked. Committed to State School at 15, where he remained but a short time because of discharge by the court. Accompanied parents to Chicago where he no sooner arrived than arrested for assaulting women on the streets. Passed through psychopathic laboratory, examined by Dr. William Healy who states that his findings coincide with ours; that the boy is an inferior normal, not defective and has about reached the limit of his mental development. Committed to Illinois reformatory.

Family history. Father paretic, an incurable invalid. Mother normal, works in restaurant. Brother, at 14, committed to an industrial school for criminal assault on 5 year old girl. One sister, apparently normal and well behaved.

Conclusions. Present I.Q. is probably a reliable index of the intelligence upon which success rests, subject, of course, to the overcoming of sex tendencies. Should not have been released and allowed to enter a new environment so soon after original commitment.

CASE D-96.

Test results. Age 19-3. Mental age 14-8. I.Q. .92. Dull-Normal. Passed adult fables, code, clock (all), fact (all), but failed on pictures, arithmetic, 5 reversed digits. Vocabulary index 68, good average adult performance.

Observations. Physically weak. Phlegmatic. Slow, looks ambitious, neglects personal cleanliness and appearance.

Delinquency. Stealing only. Stole bicycle.

Personal history. Attended public schools about 8 years, reached eighth grade. Left school, worked successfully as delivery boy until taken by court. Committed to State School at 15. Laziness prevented any remarkable progress, and when placed on parole lacked the necessary energy to hold a position. Committed a forgery and sentenced to another institution.

Family history. Father candy-maker, probably normal. Parents divorced and remarried. Mother dull, does not keep clean house. Tuberculosis in family.

Conclusions. In view of test results, especially high vocabulary index, we cannot attribute this boy's imprudence in self-management to be indicative of mental deficiency. Neither can he be considered fully average-normal, although he tests nearly so. This degree of intelligence, with a more active temperament would probably bring success and social balance. This is an interesting case of intelligence developing to nearly average level despite very unfavorable temperamental, physical and environmental conditions.

CHAPTER V. THE AVERAGE-NORMAL GROUP.

(19.2 per cent of the 470 cases.)

Extent and meaning. The 90 cases classified in this group range in I.Q. from .84 to 1.08, median I.Q. .97. The term "average-normal" is intended to represent the grade of intelligence which is common to the great majority of the population. By the Stanford Revision of the Binet-Simon Scale, Terman (54) finds that about 75 per cent of ordinary unselected school children test nearly enough "at age" to justify their classification in this group. As a social classification, "average-normal" represents the general social capacity of approximately the same proportion (75 per cent) of ordinary persons. Since our evidence favors the conception of intelligence as a trait of continuous variability, these average-normal persons do not constitute a "type" nor are they in any sense qualitatively different from those in other intelligence groups. Moreover, the individual variations are as great among the members of this group as in the others. There is greater difference between N-1, I.Q. .84, and N-90, I.Q. 1.08, than between B-95, I.Q. .80, and N-1, although the dull-normal group lies between the groups represented by B and N.

By the criterion of the tests alone, the "normality" of a given individual is represented by the proximity of his I.Q. to 1.00, the median for unselected children and adults. By the use of supplementary data we find that such a criterion is as unsafe for complete diagnosis as the arbitrary I.Q. limits sometimes used to bound the upper limits of feeble-mindedness. Not every person testing within the usual 10 per cent of I.Q. 1.00 is of average-normal intelligence in the sense that he is equal socially and industrially to most of those of similar I.Q. Our case D-97 is an example of this, while S-1 is an example of an individual whose mental capacity, as judged by his social and industrial reactions, is decidedly superior to that of most persons testing near that I.Q. For practical purposes, however, the I.Q. limits .92 to 1.10 bound the average-normals in any large group of individuals.

Social and industrial significance. Our average-normals, for the most part, have shown decided superiority to members of the three preceding groups, although the trades and activities taken up by them have been essentially the same. Young men of this group at the age of 16 years are clearly capable of taking responsibilities which the dull-normal cannot take. The capacity to learn, as judged by school progress and rate of promotion in trade classes alone justify the conclusion that these are among the brightest of the delinquents we receive. Nearly all instructors at the State School prefer to have boys in their classes who test near 1.00[1].

Whether the after-success of these average-normals is what we might expect from our classification, and if so, to what extent this will continue to be the case, will develop with time and further observation. It is significant that the success of the average-normals as a whole has been better and their failures fewer than has been true of the three preceding groups. Statistics on this point are not yet ready for publication.

Probable development. Little more can be said on this subject. The same criteria, including the stability of the I.Q. apply for this as well as the other groups. Our observations thus far lead to the belief that boys classified in the average-normal group by our criteria, between the ages of 10 and 16 years, will remain average-normal to maturity. None has yet (during three years) become noticeably inferior, nor has any remarkable superior development been observed.

The influence of heredity. The data of Goddard (25) caused him to accept the conclusion (p. 556) that "normal-mindedness is, or at least behaves like, a unit character, is dominant and is transmitted according to the Mendelian law of inheritance". Although his proof has been questioned because of the application of the hypothesis to the inheritance of feeble-mindedness it is a matter of common observation that the children of average-normal parents are usually of average-normal intelligence. Goddard was unable to find a single case of a feeble-minded child produced by normal parents in which the defect could not be accounted for by accident, disease, or physical deterioration. We have found the families of our average-normal delinquents to consist chiefly of average-normal persons. Of 77 families of boys in this and the superior group, there are but 4 in which feeble-mindedness has been found. The proportions are as follows:

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[1] There are occasional individual cases of dull-normals, borderline cases and even high grade morons who respond better, in the opinion of the trade instructors, than do some of the average-normal group. A checking-up of these shows that the desired response in these cases is not one requiring normal intelligence, but may be met by certain emotional or temperamental qualities. When intelligence is the main factor, instructors do not choose from the inferior groups.

Family A.	2 feeble-minded of a total of 58 persons.
Family B.	1 feeble-minded of a total of 10 persons.
Family C.	3 feeble-minded of a total of 30 persons.
Family D.	1 feeble-minded of a total of 9 persons.
Total,	7 feeble-minded of a total of 107 persons.

This is approximately 6 per cent, although in the total group of families (all intelligence groups combined) we found 31.4 per cent of the members feeble-minded. Further study will probably result in finding more persons of average-normal intelligence while nearly all the feeble-minded are recorded.

The families of delinquent boys do not constitute a rich field for investigation in average-normal and superior intelligence. The relatively few cases which we find usually come from stock in which most of the members are of at least average-normal intelligence, but the amount of accompanying excitability and other traits is such that many are far from average in their conduct and success in life. The recognition of these higher levels, for this reason, is more difficult for the field-worker than is the case with the lower grades of intelligence.

Case studies. The following cases are presented as being representative of the average-normal group.

CASE N-1.

Test results. Age 17-6. Mental age 13-5 I.Q. .84. Average-normal. Failures, XII to XVI: ball and field (score 2) 5 reversed digits, pictures, (described only), fact. Vocabulary index 45 (about average for 12 years). Passed code and adult fables, but none other above XIV.

Observations. Fine personal appearance, in which he takes interest. Quiet, calm, but not phlegmatic. Somewhat timid, works well. Can be trusted with independent tasks, well liked by instructors because of favorable response. Shows indications of normal capacity for learning. Excellent physical condition.

Delinquency. Stealing, truancy, immorality. Ran with a gang of foreign boys, got into miscellaneous stealing episodes. Habitually ran away from school, had to be escorted to and from home by an attendance officer. Committed sodomy.

Personal history. Passed through elementary schools with normal progress. Had entered high school when commitment became necessary (age 15). At State School adapted himself well, became adjusted to new conditions rapidly. Now in United States Naval service.

Family history. Both parents probably normal, mother a cripple, father killed by an accident when boy was 14. No feeble-mindedness in family.

Conclusions. While not tested by actual industrial experience since leaving the State School, the conduct, improvement and adaptability of N-1 have caused us to place him in the average-normal group, although testing to a slightly inferior level. He will probably remain, industrially at least, an average-normal adult.

CASE N-3.

Test results. Age 13-10. Mental age 12-0. I.Q. .87. Average-normal. Failed on reading test (X). (Barely failed. Reading O. K. but only 7 memories); Also on abstractions, 5 reversed digits, pictures (XII). Beyond this passed arithmetic, clock (XIV) and boxes (XVI). Vocabulary index, 37 (about 11 year performance).

Observations. Energetic, active. Gets along unusually well with others. Thoroughly reliable under school regulations, never violates fullest privileges. Adaptability to trade instruction has won the confidence of his instructors. Seems fully equal to any ordinary boy of his age.

Delinquency. Vagrancy, stealing, truancy, dependency. Remained out late at night, roaming streets. Committed small thefts of money. Habitual truant from school. Inadequate parental supervision.

Personal history. Attended school 7 years, reached sixth grade. Teachers report good conduct, "rather proficient in his studies", but very irregular in attendance. The probation officer says "the skating rink and picture shows occupied his evenings and the price of admission prompted the petty thefts which led to his arrest. Released on promise to be good but fell down in a few days". Committed to State School at 13. Here, after one year of grade work took up woodworking and by the age of 16 had become a good second-class carpenter. Now on parole attending school, has had no further trouble.

Family history. Mother was an invalid, died about the time of boy's commitment. Father a traveling agent, has very small income. Gives little concern to supervision of children. Two brothers, two sisters, all younger. No other institution cases.

Conclusions. We expect N-3 to reach the mental age of approximately 14 years and to adapt himself in a normal way. He surely would not be considered inferior to the average workman.

CASE N-6.

Test results. Age 13-5. Mental age 12-2. I.Q. .91. Average-normal. Passed adult fables, abstract pairs, induction. Vocabulary index 47. Failed on 5 reversed digits, reasoning problems, clock, pictures, fact, code. Good score 3 on ball and field.

Observations. Active, energetic, more adaptable than the average State School boy. Is original. Writes stories, poetry, etc., suggesting normal powers of imagination and construction. Cheerful, pleasant.

Delinquency. Stealing, truancy, vagrancy. With other boys stole small articles and sold them. Had been habitual truant for 3 years. Habit of "bumming" his way between towns.

Personal history. Attended public schools 5 years, reached fifth grade. Committed to State School at 14, after three years supervision of probation officers.

Family history. Of Mexican descent. Father Mexican consul to an American city. Both parents at least average-normal. Older brother delinquent, was here for several years. No other children. Boys had a good home, but preferred to associate with low-grade Mexican boys.

Conclusions Clearly superior to average Mexican boys of his age. We expect him to compete normally, even among American men. Is now on parole. Probable development practically average adult level.

CASE N-65.

Test results. Age 19-1. Mental age 16-0. I.Q. 1.00. Average-normal. Passed all X, XII, XIV tests, boxes, code, ingenuity (XVIII). Vocabulary 57, good definitions.

Observations. Bright appearing, cheerful, adaptable. Conscientious, interested in his work, hard worker, not dependent on others.

Delinquency. Stole a motorcycle. No other offense.

Personal history. Lived in rural district. School record good, normal progress. Left school at sixth grade to work in garage. Successful as chauffeur and at repair work. Spent much time reading mechanical publications. Was obedient, seldom ill-tempered, energetic in his work. While at State School turned out a number of personal products of his (woodworking) skill. No difficulty in discipline.

Family history. Father normal, mother epileptic. All other members normal except one immoral (of 4) sisters.

Conclusions. An unusual case of commitment for the only offense ever committed. Apparently a perfectly normal boy, with some desirable traits which add to his vocational success. We cannot expect other than continued normality.

CASE N-74.

Test results. Age 18-1. Mental age 16-4. I.Q. 1.02. Average-normal. Passed code, sense of selection, ingenuity, adult fables, abstract pairs, boxes, all of arithmetical reasoning, clock. Vocabulary 72, better than average adult performance. No blunders or obvious errors.

Observations. Quiet, reflective, seclusive. Does not associate much with other boys. Reads much, selects good books. Poor physical condition, nervous, tubercular, gave + reaction on von Pirquet test.

Delinquency. Forgery. Passed fictitious checks to the amount of nearly $200. When first placed on probation about $35.00 remained unpaid, of which he paid $20.00 and ran away from probation. Then committed to State School. Three years later on parole, passed other fictitious checks and was returned.

Personal history. Attended school regularly up to seventh grade, made normal progress. Discontinued on account of nervousness, which led to trouble with teachers. Worked with father as carpenter. Had spells of absent-mindedness, during these would wander aimlessly about. Weak in self-control but exhibited every indication, while here, of normal intelligence. Now on parole, is stock clerk in grocery. Has bought musical instrument costing $150.00 and writes that he has a "very snug little nest-egg in the bank".

Family history. Father a carpenter, steady, reliable, normal. All members of family normal. Good home (index 24 by Whittier Scale) parents interested in boy's welfare. Mother somewhat excitable, as was her mother. N-74 has one brother, normal, no sisters.

Conclusions. We may confidently expect continued normality and probably normal conduct.

CHAPTER VI. THE SUPERIOR GROUP.

(3.0 per cent of the 470 cases)

Meaning of superior intelligence. Our fourteen cases classified as "superior" range in I.Q. from 1.06 to 1.35 inclusive. The medians (see appendix Table I) are 1.11 and 1.14 The chronological ages range from 8-9 to 21-6. Eight belong to the juvenile group, six to the adult group. All are of American white stock, except S-8, who is of Mexican-Indian descent.

In applying the designation "superior" to persons, whether on the basis of tests or data from other sources, one is confronted with the same problem which is met in attempting to draw the line of demarcation between the feeble-minded and the next higher groups Inasmuch as some of our delinquent boys have shown indications of marked superiority over ordinary (average non-delinquent) persons of the same age, we are justified in forming such a group, but to decide how many cases may be fairly included requires a careful consideration of the data.

From the test results alone it is obvious that we can but designate a certain I.Q. above which the ratings represent superior intelligence. It is desirable that the dividing line be several I.Q. points above 1.00, the median for unselected persons. Terman (54, p. 95) finds that children who test from 1.10 to 1.20 "ordinarily make higher marks (in school) and are capable of making somewhat more rapid progress than the strictly average child". His data show also that these children apply themselves better, adjust themselves to new situations more easily and in other ways evidence superiority to those who test nearer 1.00. Children testing above 1.20, he finds, are "unusually superior". Observations of teachers and others in most cases substantiate the test results.

In view of these findings it has seemed reasonable to tentatively classify as "superior" all of our cases testing 1.10 or above. Supplementary data, including personal and family history, school reports, observations, etc., have satisfied us that this tentative classification was warranted. Without a single exception, every case testing 1.10

or above has found to be intellectually superior, within the social and industrial uses of that term. In addition to these, three cases (S-1, S-2, S-3) testing slightly below 1.10 have been found to be superior according to the same supplementary criteria.

To be ''superior'' within the meaning used here it is necessary that the general intellectual behavior of the person in question shall have been noticeably in advance of that of average boys of the same age and opportunity. For example, case S-1 has spent a large part of his life in institutions. He has learned many things which boys in institutions do not ordinarily learn; things which mark the more capable boys in any group. Where the opportunity has not been afforded, he has created his opportunity. In drawing he early gave evidence of talent. For want of a canvas, a scene was depicted on the photographer's light-diffusing screen. Entering the print-shop with no special privileges he learned typesetting, composition work, press-feeding and linotyping in the time usually consumed by most institution boys in learning any one of those operations. He learned to play several band instruments, in addition to the one of his choice. Such precocity we may safely assume to be the result of superior native endowment, and we could not escape that conclusion whether or not corroborated by the tests. It is cases of this kind that we include in the present discussion.

Superior intelligence and delinquency. In a previous section we have summarized some of the leading studies of the intelligence of delinquents, which show the universal preponderance of the lower level of intelligence among this class. Despite the evidence to the contrary, however, the opinion is still frequently held that a large proportion of delinquents are unusually bright; this brightness, if not general, being expressed in some special aptitude or trait. This belief has probably had its origin in conclusions hastily drawn without sufficient observations or data. Since our study is confined to a discussion of differences in the general level of intelligence no attempt will be made to inquire into the validity of the opinion as regards special aptitudes[1].

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[1] Bronner (9) discusses "special abilities and disabilities" with special reference to delinquent children. There is much to be learned through a series of impartial observations with reference to such traits.

With reference to superior intelligence as defined by us, we find among our cases and among those reported by others, evidence that very few delinquents in institutions may be considered "unusually bright". It is common for institution supervisors who have not been trained in observation to judge the intelligence of a given case by the average for the institution. At Whittier State School where the average I.Q. at the time of this writing was .81, judgments on such a basis would result in classifying as "superior" most boys who are only average for their ages. Considering that many supervisors and instructors do not know the correct ages of the boys in their charge, and that they quite commonly under-estimate these ages, it would not be surprising if nearly 50 per cent gave the impression of intellectual superiority in their work, athletics, and every-day activities.

Another reason for designating "genius" what is really mediocrity is illustrated in the frequent reports of juvenile crimes and mischievous pranks which are supposed to be the result of extreme cunningness and trickery. These stories, of course, are usually exaggerated, and when the facts are obtained there is little left to warrant the hasty conclusion. We have yet to find in the constant stream of delinquents which comes under our observation, performances in delinquent conduct which could not have been duplicated by boys of average intelligence, were they so inclined. We do not know, of course, why any boy of superior intelligence and average opportunities should become delinquent. There is certainly no evidence that the superiority, in itself, is an important factor.

Investigations of others. Where intelligence tests have been applied to delinquent children it has been the primary object to determine the proportion of feeble-minded, and hence the superior cases have been ignored, or merely rated "normal". The early revisions of the Binet-Simon scale did not extend far enough at the upper end to differentiate clearly between the average and superior adult cases. Some studies, however, have reported cases of superiority. Morrow and Bridgman (41) found six "normal" out of 60 cases of delinquent girls. These six are reported to be "capable and trustworthy" and to "seem normal in every way." Their highest case was a girl of 18 years who tested to the "adult" level with Goddard's revision of the

Binet Scale. Spaulding (5) in the study of 400 women offenders, found 88 cases, or 22 per cent, to be of ''good native ability''. Those of this group ranged in age from 17 to 71 years, and with an average attendance of 9.3 years had completed about seven years of school work. They were classified as being ''capable'' women for industrial work, and to be the ''pick'' of the institution, both from the results of the examination, and their apparent fitness to hold responsible positions. McCord (39) studied 100 prostitutes, none of whom were institution cases (at the time of the investigation). Of his first group of 50 cases, 45 per cent were rated ''normal''. Of the second group of 50 cases, 55 per cent were rated above the level of feeble-mindedness. Of his ''House of Shelter'' girls, six out of 38 cases, or approximately 17 per cent were rated ''normal''. Renz (49) examined 100 delinquent girls and found only three who tested ''above age''. Goddard (27) reports that of 100 cases selected at random from the Newark juvenile court, only one tested fully up to ''average normal''. Bronner (7) studied delinquent girls in comparison with (a) college girls; (b) girls in evening classes, none of whom had attended high school; and (c) servant girls. No attempt was made to measure the general level of intelligence, but in the tests given, (opposites test, memory for words, memory for passages, and completion tests), the delinquent girls seldom reached or exceeded the median of the college group, and in none of the tests were there indications that more than an isolated few were really ''superior'' in performance. Hauck and Sisson (31) found no cases of ''super-normality'', but in view of their statement that the tests above the twelve-year level were discarded, this is not surprising. Ordahl (45) found no cases of I.Q. higher than 1.07 among his juvenile court children . Pintner and Toops (47) report 10.6 per cent of their work-house cases ''normal'', but do not suggest that any are superior. Terman and Knollin (55) found 5.2 per cent of 155 San Quentin inmates ''superior'' and 1.3 per cent ''very superior.''

Heredity and superior intelligence. The relation of heredity to the higher grades of intelligence has been referred to in the discussion of the average-normal group. The relatively few superior cases among delinquents make it impossible to obtain mass data on the distribution of family traits. As most of our delinquents of the lower groups have come from stock of which the intelligence of the propositus is representative, so most of our superior boys have come from relatively superior stock. It is true that among the members of these families we find other heritable traits (excitability, nomadism, etc.,) which probably contribute directly to delinquency. So far as concerns the grade of intelligence alone, we do not find that the families of superior delinquents differ appreciably from the families of superior non-delinquents.

Little is known of the inheritance of superior intelligence as a separate trait. Until the facts prove otherwise, it is only reasonable to assume that it behaves, biologically speaking, like feeble-mindedness. It is interesting to note that without exception our superior cases have shown superiority from a very early age, data on this point strengthening the assumption as regards inheritance. In some cases the superiority has developed in very unfavorable social environments.

Probable development. With confidence in the I.Q. as a reliable index of intelligence we have predicted that all of our boys testing 1.10 and higher will reach the "superior adult" level of intelligence. Seven of them have already passed the 17-year level by the Stanford Revision of the Binet-Simon scale. In no case has it been necessary to change the classification to that of a lower (even average-normal) group. All, so far as we have been able to obtain data, have shown continued superiority over their fellows and unusual adaptability. Although three cases have been committed to other institutions for offenses after discharge from the industrial school, the irregular conduct has not indicated inferior capacity to adapt themselves to social and industrial conditions. The follow-up histories of these three cases indicate that the offenses were committed with deliberate attempt and in no case because of inability to earn an honest livelihood. The present institution records of these three young men are exceptionally good. All have gained special privileges through superior adaptability and progress.

CASE STUDIES.

It would be interesting to report individual, personal, and family histories for all of our superior cases. Space will be taken for only five, which may be considered representative of the group.

CASE S-6.

Test results. Age 19-4. Mental age 17-7. I.Q. 1.10. Superior. Second test, one year later: Mental age 18-1. I.Q. 1.13. Difference due to success in sense of selection (XVIII-4) in second test. Vocabulary index 64 in first test, 60 in second test. Passed all tests up to and including average-adult group, excepting vocabulary for XVI.

Observations. Bright appearing, quick, energetic, easily adapts himself to new conditions. Is capable in many lines—mechanical drawing, several other kinds of manual work. Receives excellent marks in school. Undoubtedly one of three brightest boys in the School while here. Is morally clean and a leader in games and organizations.

Delinquency. Only offense consisted in embezzling a large sum of money entrusted to him to be collected. Under the impulse of the moment left the city, purchased an automobile and drove to another state.

Personal history. Has always been honest, obedient and interested in his home. During early adolescence was once seized with a desire for excitement similar to that which caused his delinquency and left home, traveling in several other states before returning. Aside from these two escapades, his conduct was superior in every way. Graduated from elementary schools, entered a technical high school and was about to enter upon third year when offense occurred. Responded splendidly at the State School and expresses his determination to maintain himself independently and respectably when he leaves. Few of our cases show the degree of moral comprehension and judgment that we have found in this boy.

Family history. Both parents are highly intelligent people; are now separated. No other instances of waywardness have yet been found in family. The other son is bright and well behaved.

Conclusions. It is hardly necessary to offer additional evidence of superiority for persons reaching eighteen-year level in the Binet scale. In this case our independent observations have been equally convincing. We may conclude that this boy will remain in the superior adult group.

CASE S-7.

Test results. Age 21-6. Mental age 17-8. I.Q. 1.11. Superior.

Observations. A highly intelligent young man, as testified by all who have observed and known him. Is conceited and selfish, but has clear comprehension of the moral aspects of the situations in which he has found himself. Says that he realizes his own weaknesses, but is utterly unable to resist the impulse to commit some daring crime. Once, while on parole, returned of his own accord, fearing that he was about to yield to evil impulses.

Delinquency. Principal offense, highway robbery. Other offenses, forgery, embezzlement, immorality. First came into court at 17 years of age, having held up a street car and attacked the conductor, who refused to give up his money. Forgeries and embezzlement followed temporary release.

Personal history. Made rapid progress in the elementary schools, reached second year of high school at 15 years of age. Fond of mathematics and history. Has taken four years of foreign language. Attended a school of dramatics for one year. Has been employed mostly in clerical positions always with considerable responsibility and trust. Earned $100 per month before commitment. Has shown ability in cartooning, but was not inclined to follow that kind of work. Was committed at 17 years of age, paroled and re-paroled on numerous occasions, and discharged at 21. Shortly after discharge committed further offenses and is now in a state prison, where he is making an excellent record, spending much of his time in private study.

Family history. Parents successful, socially prominent people. Father was an expert machinist, not living at time of delinquency. Four other children, three boys and one girl, all reported normal and well-behaved. An excellent home provided.

Conclusions. A striking example of the operation of factors external to intelligence in the causation of crime. The following statement quoted from a letter which he wrote from the penitentiary is significant: "I have recently noticed some familiar faces among the new-comers. While I am sorry for them, I 'live in a glass house' myself. It is strange that we can be so blind as not to see the end of a path so emblazoned with sorrow as is the path of perversity. I have learned my lesson, too late, perhaps, but I am not without hope. I cannot help feeling that somehow there will still be an opportunity for me, even if I have to serve my entire sentence."

CASE S-8.

Test results. Age 7-0. Mental age 8-0. I.Q. 1.14. Superior. Passed all of eight-year tests. Repeated six digits, but failed to tie bow-knot.

Observations. Mexican-Indian characteristics. Showed unusual interest and energy, especially for a boy of his race. Speaks English fluently. Bright-appearing, active. Gives appearance of precocity. Physically strong, in good health.

Delinquency. Only offense, stealing sacks. Was in detention home at time of examination. Held because home was unsatisfactory.

Personal history. In first grade in school, doing well. Conduct had been normal up to time of the offense.

Family history. Parents born in Mexico, of a low class. Did not provide a respectable home for their children.

Conclusions. Here we have a case of even better than average intelligence despite racial and environmental conditions. That the boy could have learned to speak English so well is in itself evidence of precocity. Often have we seen Mexican children whose low mental ages were explained (by others) entirely by surroundings not inferior to those of this boy. Should develop normally and if given average opportunities will probably rise socially above the average of his own people.

CASE S-11.

Test results. Age 11-0. Mental age 12-1. I.Q. 1.16. Superior. Among high successes were box problems, problems of fact, induction, vocabulary (index 50). Later test showed practically same I.Q.

Observations. Shows unusual quickness and adaptability for a boy of eleven years. Is polite, obliging, usually willing to learn, reads much and profits naturally from his daily experiences. Shows marked ability in school, but often has periods of stubbornness.

Delinquency. Burglary, truancy. Broke into a private house, taking several small articles. Also broke into a store in the small town in which he was living. Several truancy escapades, often taking extended trips from home. Said to have always been a source of trouble.

Personal history. Born in a small city, spent most of his life in a village. Suffered a severe attack of pneumonia during infancy, recovery from which had seemed doubtful. Has had several "sick spells" since. Reached fourth grade in school and because of his incorrigibility was considered backward. "Would not apply himself." Was even considered mentally defective by some of his relatives, although he has showed no symptoms of other than all-around superior intelligence since his commitment.

Family history. Family chart shows all normal intelligence except three children of the mother's brother, whose normality is doubtful. Both parents bright, capable people, respected in their community, but both excitable as are several other relatives. Truancy and nomadism common to all of four brothers of propositus. Father's father was a wanderer. Several cases of tuberculosis in family. The home has an index of 15 points by the Whittier Scale for grading home conditions.

Conclusions. We have here a case in which irregularity in conduct is mistaken by relatives and even some teachers as an indication of low intelligence. In view of the test results, however, together with his ability in regular school subjects, we cannot escape the conclusion that he properly belongs in the superior group.

CASE S-13.

Test results. Age 13-7. Mental age 16-7. I.Q. 1.22. Superior. A regular, even performance. Passed code, 8 digits, adult fables, and all tests below XVI, except arithmetic problems in XIV. Reacted to tests quickly and easily, showing clear indications of superiority over the average boy of his age.

Observations. All who know him consider him of superior intelligence, although because of irregularities in behavior he is frequently misjudged. Reads much, takes great interest in school, became proficient in all details of his chosen trade (carpentry) in remarkably short time. Very active mentally and physically. Has talent for drawing. Misconduct usually consists in ugly fits of temper.

Delinquency. Drunkenness, burglary, stealing. Found "intoxicated to insensibility." Numerous small thefts from stores and dwellings.

Personal history. In good physical condition, except for enlarged adenoids and tonsils which have been removed since the examination. Attended school regularly. Reached seventh grade at the age of 13 years. Has no vocational record previous to commitment. While at the State School learned carpentry. Upon leaving joined the army.

Family history. Father a common laborer, of "ugly disposition". Much violent temper and alcoholism in father's family. Mother dead, boy has stepmother four years older than himself, with whom he was unable to agree. Other children in the family are normal as far as known. The home conditions were very unfavorable. Parents taught and encouraged children to steal and use liquor.

Conclusions. The fact that this boy, at the age of 13 years and 7 months tests to the average level found by Terman among adult men and women of ordinary schooling, is sufficient reason for classifying him as "superior". That this superiority is of native endowment can hardly be questioned in view of the unfavorable home conditions. We expect this boy to maintain the relative degree of superiority which he now shows, and to reach the superior adult level of intelligence.

CHAPTER VII. OFFENSES AND INTELLIGENCE.

Reasons for commitment. Under the Juvenile Court law of California a child under 18 years of age may be declared a ward of the court because of (a) having committed an offense in violation of the law; or (b) being "in danger of growing up to lead an idle, dissolute or immoral life". In ordinary practice, children of the former class are considered **delinquent,** while those of the latter class are considered **dependent.** Thus, all court cases consist of children who have either committed an offense or who are likely to do so if not curbed. Wards of the court may be either placed on probation or committed to an institution. It follows naturally enough that the cases committed to institutions are those whose offenses have been more serious, or who are in the greatest danger of becoming delinquent. It is important to bear this fact in mind in view of the predominance of institution cases in the material for this report.

The placing of a child in custody usually means that he has already been given repeated trials on probation without success. During the pre-institution period most of our cases have been guilty of more than one form of misconduct. Seldom do we have cases committed for a single offense. In fact, the offenses are usually not specifically enumerated during the court proceedings as in adult cases. It is generally considered that the various acts are but different expressions of the same causes, and that the treatment must consist in separating the child from the surroundings in which these expressions occurred.

In Appendix Table I the different offenses for each case are indicated by appropriate abbreviations. The number of offenses per individual varies from one to seven, averaging about three. There is no particular relation between the number of offenses per person and the level of intelligence. Following are samples of the occurrence of several offenses in combinations:

Case S-13.	I.Q. 1.22.	Drunkenness, burglary, stealing.
Case S- 1.	I.Q. 1.06.	Stealing, forgery, highway robbery, incorrigibility.
Case N-70.	I.Q. 1.02.	Forgery, larceny, burglary, truancy, stealing.
Case N-60.	I.Q. 1.00.	Burglary, larceny, truancy.
Case D-51.	I.Q. .86.	Drunkenness, larceny, highway robbery, vagrancy.
Case D- 2.	I.Q. .81.	Larceny, burglary, stealing, truancy.
Case B-15.	I.Q. .74.	Immorality, truancy, stealing, incorrigibility.
Case B- 4.	I.Q. .72.	Forgery, stealing, burglary, larceny.
Case F-15.	I.Q. .58.	Truancy, dependency, incorrigibility, larceny, drunkenness.
Case F- 2.	I.Q. .48.	Immorality, incorrigibility, vagrancy.

These offenses not having been legally pronounced with reference to all of our cases, it has been necessary to use terms of this kind in classifying delinquent conduct. Upon the basis of data gathered by the field-workers we have established for each case the "principal offense" or that which in our judgment has been of the most serious consequence so far as the individual in question is concerned. In most cases this represents the last offense, usually the act which was considered by the probation officers and Juvenile Court judge to be indi-

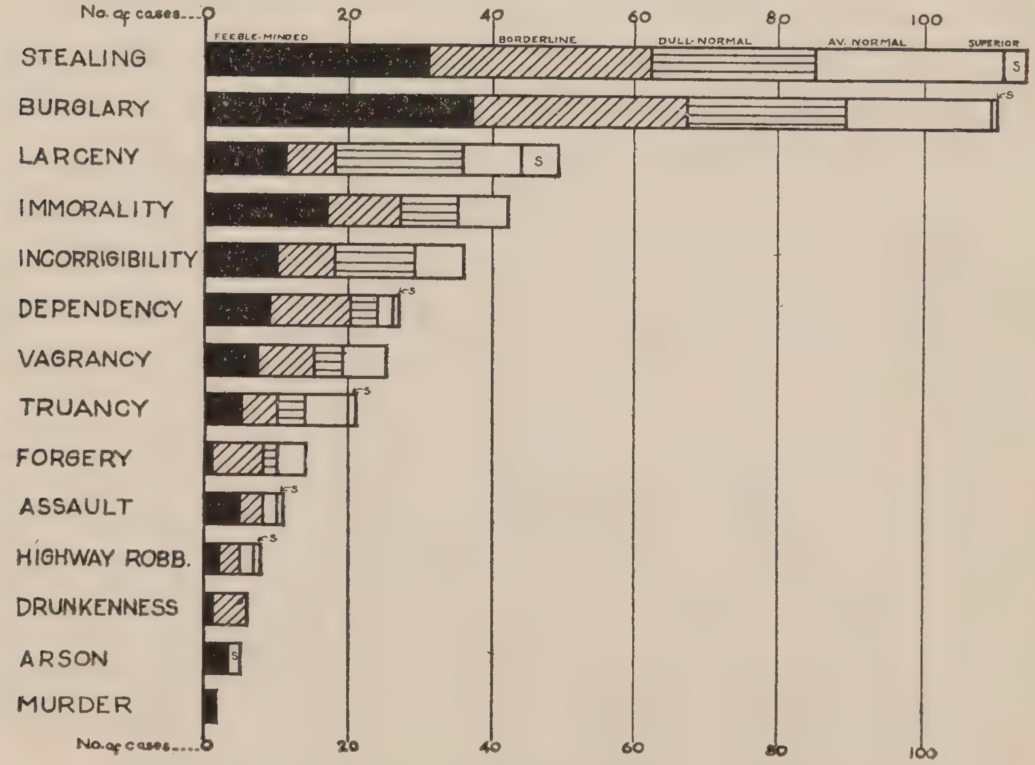

Fig. 19. Distribution of principal offenses by social intelligence groups.

cative of conditions which call for commitment to an institution. In some cases the principal offense represents the form of conduct which has been most often repeated, or which is most characteristic of the delinquency, whether or not it happened to be the last offense. In Appendix Table I and elsewhere in this report, a list of offenses for a given individual is listed in order of their importance, beginning with the principal offense.

Relative frequency of offenses. The distribution of principal offenses by social-intelligence groups is given in Table IV and shown graphically in Fig. 19. It will be seen that nearly all intelligence groups are represented in all offenses except those with but a few cases reported. Dividing the total number into so many small groups leaves opportunity for little more than conjecture as to the relation between the social-intelligence group and the nature of the offense. Feeble-mindedness occurs in all offenses, and if we eliminate those of less than 20 cases, in each instance it runs not far from 30 per cent, which is our proportion for all offenses combined. An attempt has been made in Fig. 20 to compare the extent of feeble-mindedness for the different offenses. It is evident that feeble-mindedness is more closely associated with some offenses than with others. Forgery,

TABLE IV. DISTRIBUTION OF PRINCIPAL OFFENSES BY SOCIAL-INTELLIGENCE GROUPS

	F.M.	Bord.	D.Nor.	Av.Nor.	Sup.	Total	Per Cent.
1. Stealing	30	31	23	26	3	114	24.25
2. Burglary	37	30	22	20	1	110	23.40
3. Larceny	11	7	18	8	5	49	10.43
4. Immorality	17	10	8	7	--	42	8.94
5. Incorrigibility	10	8	11	7	--	36	7.66
6. Dependency	9	11	4	2	1	27	5.75
7. Vagrancy	7	8	4	6	--	25	5.32
8. Truancy	5	5	4	6	1	21	4.45
9. Forgery	1	7	2	4	--	14	2.98
10. Assault	5	3	--	2	1	11	2.34
11. Highway Robbery	2	3	--	2	1	8	1.70
12. Drunkenness	1	3	1	--	1	6	1.27
13. Arson	3	2	--	--	--	5	1.06
14. Murder	2	--	--	--	--	2	0.43
Total	141	128	97	90	14	470	100.00

drunkenness, and larceny have the least proportions, while murder, arson and assault have the greatest proportions. Care should be taken in reading Fig. 20 to note the number of cases on which the percentage of feeble-minded for each offense is based. The offenses occurring with the least frequency for the entire group invariably fall at the extremes of this curve and for these the numbers are too small for the percentages to be of much value for comparative purposes. The offenses occurring with the greatest frequency all occur nearer the median of the distribution in Fig. 20. This suggests that with a large number of cases of murder, forgery, etc., the proportion of feeble-minded would probably more nearly approach the common average.

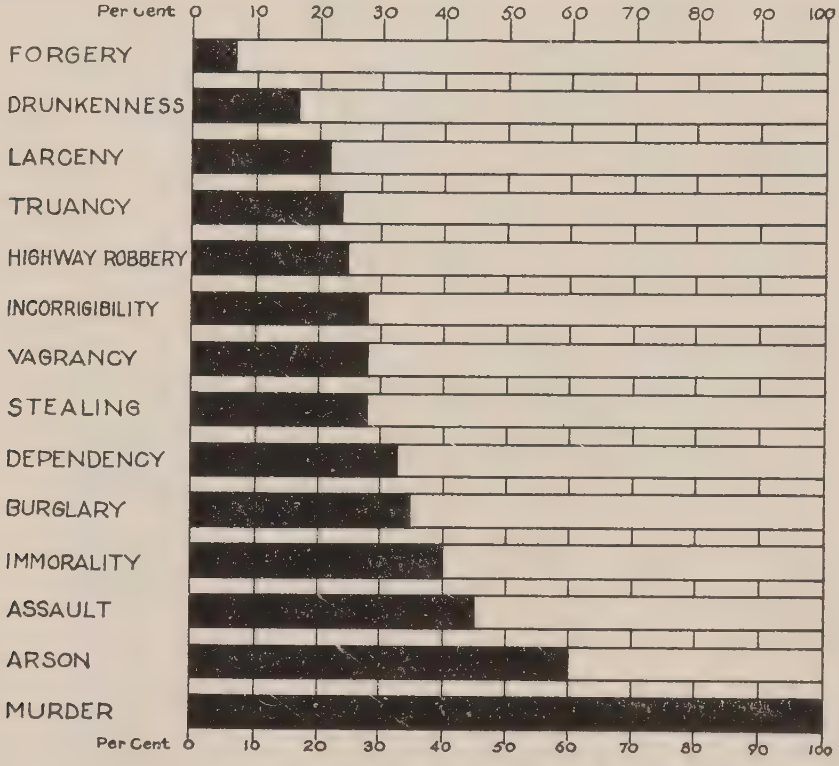

Fig. 20. Distribution of principal offenses according to the percentage of feeble-minded in each.

Probably a better idea of the relation between the several offenses and the intelligence of the offender can be obtained through a study of the distribution by intelligence quotients in Fig. 21. Here each circle represents one boy, the distribution of circles being exactly the same as in Fig. 3. In this case, the principal offense for each boy is represented by its appropriate abbreviation, placed within the circle. The offenses are distributed, so far as possible, so that they

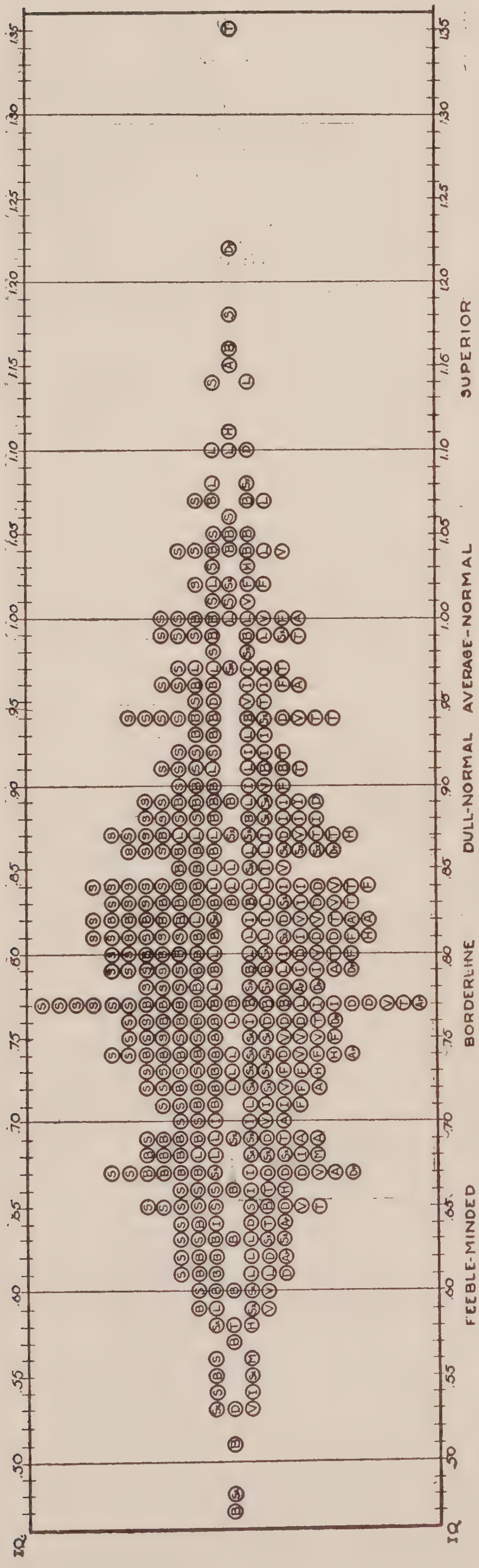

Fig 21. Distribution of principal offenses by individual intelligence quotients.

may be found in order of frequency from top to bottom, beginning with stealing, burglarly, etc. Because of the unavoidable lapping, Table V has been prepared, to show the range of I.Q's. and the median I.Q's. for each offense. The ranking of the offense frequencies by median I.Q's. differs but little from the ranking in Fig. 21, in which the proportion of feeble-mindedness only was considered.

We are unable to draw any definite conclusions from these figures as to the relation between the grade of intelligence and the nature of the offense. If we discard the five offenses having fewer than 14 cases, upon the assumption that smaller numbers would have little significance, we obtain a distribution in order of median I.Q's. as follows:

1.	Larceny	84
2.	Truancy	84
3.	Incorrigibility	82
4.	Stealing	81
5.	Forgery	80
6.	Vagrancy	80
7.	Burglary	79
8.	Dependency	77
9.	Immorality	76

TABLE V. SHOWING THE HIGHEST, LOWEST, AND MEDIAN INTELLIGENCE QUOTIENTS FOR EACH PRINCIPAL OFFENSE.

	Offense	No. Cases	Lowest I.Q.	Highest I.Q.	Median I.Q.	Rank By Median I.Q.
1.	Stealing	114	.54	1.18	.81	4
2.	Burglary	110	.47	1.16	.79	7
3.	Larceny	49	.59	1.14	.84	1
4.	Immorality	42	.48	1.08	.75	12
5.	Incorrigibility	36	.54	.97	.82	3
6.	Dependency	27	.53	1.10	.77	11
7.	Vagrancy	25	.53	1.04	.80	6
8.	Truancy	21	.58	1.35	.84	2
9.	Forgery	14	.71	1.02	.80	5
10.	Assault	11	.67	1.15	.79	8
11.	Highway Robbery	8	.58	1.11	.78	9
12	Drunkenness	6	.67	1.22	.78	10
13.	Arson	5	.62	.78	.74	13
14.	Murder	2	.56	.68	.62	14
	ALL CASES	470	.47	1.35	.81	....

From this list we might note (a) the relatively high median I.Q. for truancy, which is probably the least consequential of all the offenses; (b) the low median I.Q. for forgery, which suggests that this offense requires little ingenuity or skill; (c) the relative positions of dependency and immorality, suggesting a definite relation between these conditions and low intelligence; (d) the proximity of all of these median I.Q's. to the median I.Q. for all of our delinquents (.81). The greatest deviation in this list is but 5 points from the general median.

TABLE VI. DISTRIBUTION OF PRINCIPAL OFFENSES SHOWING THE OCCURRENCE OF EACH IN COMBINATION WITH OTHERS.

	S	B	L	Sx	I	D	V	T	F	A	H	Dr	Ar	M	K	T't'l
1. Stealing	42	5	4	3	24	21	3	45	1	....	2	..	..	..	..	150
2. Burglary	59	14	30	6	22	17	8	43	2	2	2	1	..	..	..	206
3. Larceny	23	15	5	2	18	5	1	31	....	....	2	1	..	..	..	103
4. Immorality	19	5	5	4	7	13	2	16	1	1	1	...	..	..	1	75
5. Incorrigibility	8	1	1	5	11	9	4	16	....	1	..	1	1	..	..	58
6. Dependency	....	....	....	1	2	23	....	1	1	....	..	..	..	..	..	28
7. Vagrancy	8	1	1	5	11	8	1	14	....	....	..	1	..	..	..	50
8. Truancy	5	1	4	....	8	3	4	7	....	....	..	1	..	..	..	33
9. Forgery	10	5	2	....	1	1	....	6	2	1	..	..	..	..	..	28
10. Assault	4	1	1	....	3	1	....	3	....	5	..	..	..	..	..	18
11. Highway Rob.	4	2	1	2	....	1	1	1	2	1	1	..	..	..	..	16
12. Drunkenness	1	2	1	....	....	2	1	....	1	....	1	1	..	..	..	10
13. Arson	2	....	1	....	2	1	....	2	....	....	..	..	2	..	..	10
14. Murder	....	....	....	....	....	....	....	....	....	....	..	..	..	2	..	2
Total	185	52	56	28	109	105	25	185	10	11	9	6	3	2	1	787

Omitting dependency, which, of course, is not an offense[1], we have divided the remaining 13 conditions into three groups: (I) offenses against property; (II) offenses against the person; (III) offenses against the peace and order of the community. The complete classification is shown in Table VII. A definite inferiority may be observed in the intellectual average for Group II, as judged by the median I.Q. It is true that we have introduced a low I.Q. by including the offense of murder, of which there are but two cases, but we have likewise included arson, assault, drunkenness, and highway robbery, which, if omitted, would leave the data favorable to the same inference; i. e. that the average intelligence of boys whose principal offense is one of personal injury is lower than that of boys who have committed offenses chiefly against property or against the peace and order of the community.

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[1] The reasons for including dependency with the offenses in the foregoing tables and diagrams are explained in a later paragraph.

This inference is in accord with other recent observations. Most others, however, have referred exclusively to the proportion of mental defectives among persons guilty of different forms of conduct. Rossy (50) in studying 300 male prison inmates found (a) the highest proportion of feeble-minded (35.3 per cent) among sex offenders and (b) the lowest proportion (15.5 per cent) of feeble-minded among prisoners guilty of crimes against property. Bowers (5) finds a greater proportion of crime against the person (referring particularly to murder and sex offenses) among the mentally defective than crimes against property (referring to larceny and burglary). We can hardly infer, however, that any particular level of intelligence is typical or

TABLE VII. CLASSIFICATION OF PRINCIPAL OFFENSES INTO LARGER GROUPS WITH REFERENCE TO SOCIAL CONSEQUENCE.
(DEPENDENCY NOT INCLUDED HERE)

CLASS I. OFFENSES AGAINST PROPERTY, 65.9 PER CENT.		
Stealing	114 cases, median I.Q.	.81
Burglary	110 cases, median I.Q.	.79
Larceny	49 cases, median I.Q.	.84
Forgery	14 cases, median I.Q.	.80
Arson	5 cases, median I.Q.	.74
Total for Class I, 292		.80
CLASS II. OFFENSES AGAINST THE PERSON, 14.2 PER CENT.		
Immorality	42 cases, median I.Q.	.75
Assault	11 cases, median I.Q.	.79
Highway Robbery	8 cases, median I.Q.	.78
Murder	2 cases, median I.Q.	.62
Total for Class II, 63		.73
CLASS III. OFFENSES AGAINST PEACE AND ORDER, 19.9 PER CENT.		
Incorrigibility	36 cases, median I.Q.	.82
Vagrancy	25 cases, median I.Q.	.80
Truancy	21 cases, median I.Q.	.84
Drunkenness	6 cases, median I.Q.	.74
Total for Class III, 88		.80

representative of any group of delinquents with reference to the kind of offense.

Predominance of property offenses. The overwhelming proportion of offenses against property (Table VII), 65.9 per cent in comparison with 14.2 per cent of offenses against the person and 19.9 per cent against peace and order, suggests the importance of the property-rights question in the study of delinquency. This kind of misconduct is by far the most common in all groups of delinquent boys and occurs in still greater proportions among court cases than among those who have been committed to institutions. The apparent weakness in ability to appreciate the ownership of property is one of the earliest indications of potential delinquency.

In feeble-minded persons it is not difficult to explain the failure of the property sense to develop normally. Children under eleven years of age are very apt to take or destroy things with little thought of the resulting loss or inconvenience to the owner. Feeble-minded boys and young men, eighteen, nineteen and twenty years of age are essentially children of less than 12 years. As long as feeble-minded persons are allowed to be at large, we may expect nothing else than that their reactions toward the property rights of others will be of no higher level than that of children. There is also good reason to believe that in young adults this form of misconduct is much more serious than in younger children, because of the habits formed during years of physical growth. Moreover, the added strength and endurance of young men permit of offenses which younger children are not likely to commit.

In the case of more intelligent persons this weakness in comprehension or exercise of judgment concerning the property rights of others is not so easily explained. We cannot say that average-normal or superior boys 16 years of age or over do not understand such rights, excepting of course those who are for some reason extremely ignorant, cases of which we have yet to find. In the two previous chapters, several bright boys are described, who are shown by their historical records to have early in life developed or acquired strong tendencies to steal and destroy property. These tendencies may perhaps be explained by the feebleness of inhibiting qualities (Chapter IX) or it is possible that it may be largely due to the force of example. The latter view would at least be more nearly in accord with common opinion.

Stealing. By this offense we refer to theft of money or articles to the value of less than $50.00. It includes for the most part articles of ordinary use from which a boy may derive personal pleasure or a small profit. Bicycles, money, pigeons, rabbits and junk are the most common objects for petty stealing. Following are some individual examples listed by increasing intelligence quotients:

I.Q. .66—Stole sacks and food from stores. Food not stolen because of hunger or necessity. Sacks sold for "spending money".

I.Q. .73—Colored boy. Stole money entrusted to him to buy groceries for the family

I.Q. .75—Stole small amounts of money from home and other boys. Hid money, probably buried in ground, and usually forgot where it had been hidden. Also stole bottles to exchange for pennies. Parents in reasonable circumstances.

I.Q. .75—Stole junk and sacks.

I.Q. .82—Stole money in very small quantities, but with regularity, from the man by whom he was employed.

I.Q. .98—Stole pigeons from neighbors.

I.Q. 1.04—Several offenses. Admitted having stolen 25 bicycles at different times.

I.Q. 1.07—Stole fishing-tackle, rabbits, bicycles.

I.Q. 1.18—After parents' home burned, stole $40—all they had left.

Burglary. Refers to entering or breaking into a house or other building with intent to steal. Examples:

I.Q. .55—With some Indians attempted to break open a bank safe. Indians escaped. This boy and his younger brother (both feeble-minded) committed to an institution.

I.Q. .69—Caught in the act of robbing a private dwelling. Had been in jail 5 times previously on charge of larceny. Had also stole a number of bicycles. While on parole committed another burglary.

I.Q. .85—Attempted to break open a safe.

I.Q. .85—Broke into a church, damaged property to the value of several hundred dollars.
I.Q. .96—Burglarized the home of a relative.
I.Q. 1.04—Forced the door of a private garage, and stole a license number for his own machine.
I.Q. 1.07—Burglarized a private dwelling.

Larceny. Involves theft of money or property to the value of $50 or more[2]. The most common of these articles are motorcycles and automobiles. Examples:

I.Q. .59—Ran off with motorcycle. Destroyed machine when apprehended.
I.Q. .73—With other boys stole a quantity of sporting goods.
I.Q. .78—Stole two motorcycles and horse and buggy.
I.Q. .87—Stole automobile tires.
I.Q. 1.02—Stole motorcycle.
I.Q. 1.10—Stole an automobile, in which he attempted elopement.

Immorality. Includes sex offenses only. Many of these offenses which have been the principal cause of commitment in approximately 9 per cent of the total number of cases are of extremely serious consequence, but for obvious reasons are not discussed in detail here. The youthful sex offender, whatever his grade of intelligence, is a problem in himself. His delinquent conduct has taken on a form which makes him a far worse menace to society than are those who commit offenses against property. As we have already seen, immorality ranks relatively low in the distribution of offenses by intelligence. The proportion of feeble-minded among sex offenders is higher than that for most others. This in part accounts for the disgusting form which some of these acts have taken.

Sex offenders, like other delinquents, often commit other offenses. Of 42 sex offenders, in only 6 cases is immorality the only offense, although in 26 cases it is the principal offense (Fig 5). Following is a list of other offenses and the frequency with which each occurs among 42 sex offenders:

Stealing	19 cases
Truancy	16 cases
Incorrigibility	7 cases

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[2] Legally, a distinction is made between "petit larceny" and "grand larceny" referring to whether the value of the stolen goods is less or more than $50.00. In juvenile cases the stealing of articles of small value is not usually designated by either term.

Larceny	5 cases
Burglary	5 cases
Vagrancy	3 cases
Assault	1 case
Highway Robbery	1 case
Forgery	1 case
Immorality alone	10 cases

The following are examples of sex offenses of boys of different intelligence levels:

I.Q. .60—Rape. Little girl.
I.Q. .72—Rape. Little girl. Also immoral associates.
I.Q. .74—Incest. Younger sister.
I.Q. .80—Rape. Four little girls. Several other sex offenses.
I.Q. .81—Crime against nature.
I.Q. .88—Sodomy.
I.Q. 1.11—Rape. Daughter of employer.

Incorrigibility. Refers to cases who are entirely beyond the control of their parents or guardians. It usually involves a flat refusal to obey the parents, and a desire on the part of the child to be his own censor wihout regard to supervision. In all cases classified "incorrigible" the conduct has been noticeably bad in contrast with conditions which are common in the family. Examples:

I.Q. .77—Has violent temper. Attacked mother when could not have his own way. Would stay away from home because of unwillingness to obey parents.
I.Q. .92—Attacked mother on several occasions with chairs and other articles of furniture. Refused to obey rules of common home conduct.
I.Q. .97—Very unmanageable. Fine home. Several other children in family, none of whom give any trouble. Parents kind and tolerant, but unable to control him.
I.Q. 1.07—Could not be controlled by parents. Was placed in several private homes, but with the same result. Only under strict discipline and constant supervision can be managed.

Dependency. This condition refers primarily to the lack or inadequacy of parental supervision. It is not, of course, an offense. The use of the term does not always mean that the child in question has committed an offense, but it happens that few of our cases have been committed because of dependency alone. Although frequently given as the principal reason for court action, usually the history shows that delinquent conduct had already occurred, or was about to develop. This recognition of potential delinquency, which will be referred to in a later chapter, marks a distinct advance in the prevention of juvenile crime.

Of our 27 cases in which dependency is given as the principal reason for commitment, two were incorrigible, one immoral, one a truant, and one had committed forgery. In 76 additional cases dependency is given as one of the principal reasons. Many of the latter cases are evidences of the failure to take adequate preventive measures when delinquency was imminent. More detailed studies of the intelligence of dependent children are reported by Terman and Wagner (58), Fernald (22), and Williams (63).

I.Q. 1.10—Lived with grandparents, who were unable to give adequate supervision.
I.Q. .95—Ran away from an unfavorable home.
I.Q. .80—Mother a widow, wholly dependent on charity, unable to support her family.
I.Q. .77—Parents left home without making provision for the boy.
I.Q. .61—Parents taken prisoners during Mexican revolutionary outbreaks. Boy came to California when about 8 years of age. Nothing further known of family.

Vagrancy. This includes aimless wandering, especially when associated with or resulting in offensive conduct. Vagrancy has been shown to be closely related to hereditary weakness of the inhibitory powers, and subsequent failure to control the wandering impulse. Juvenile vagrancy occurs among our cases in all ages from 9 to 19 years inclusive, the median being 14 years, the same as the whole median. The family history usually shows hereditary nomadism, which in most cases explains the early expression of this offense. Vagrancy is usually associated with other offenses, particularly stealing and immorality. Following are examples of what is meant by our use of the term:

I.Q. 1.04—Wandered around the country, sleeping in alleys, old buildings, etc., and stealing junk.
I.Q. .90—"Leading the life of a common hobo".
I.Q. .79—Found sleeping in old houses on rags, etc.
I.Q. .60—Refused a position paying $40 per month and keep, in order to go "bumming."

Truancy. By this is meant habitual or serious unexcused absence from school. In most of our cases truancy has been associated with one or more of the following conditions: (a) dislike for school work; (b) dislike for some particular teacher; (c) inability to do the work assigned; (d) general unrest, due to inability to control the wandering impulse; (e) disagreement with principal or teachers over other offenses. It seems unnecessary here to cite examples of truancy. Clark (11) reports an interesting and detailed summary which includes representative cases.

Forgery (and embezzlement). Includes the passing of fictitious checks, forging endorsements and taking entrusted funds for personal use. Following are some examples:

I.Q. 1.11—Forged several checks while employed as bookkeeper. When refused an increase in salary (which was at that time $125 per month) embezzled nearly one thousand dollars from his employers.

I.Q. 1.02—Passed a number of forged checks. Had a good home. No need for money. Father had him work and earn the necessary money to make up the deficit.

I.Q. .72—Cashed six worthless checks. Amounts $10 to $45.

I.Q. .67—Attempted to pass a fictitious check in a bank in which his father was janitor.

Assault. This includes attack with intent to do bodily harm. As used in this study it does not refer to sex cases. This form of conduct is usually associated with violent temper, the offenses being committed during an emotional outburst. Following are examples:

I.Q. .96—Purposely tripped another boy, fracturing his skull.

I.Q. .79—Attacked man with a knife.

I.Q. .69—With some playmates, jumped on one of their number purposely and broke his leg. The playmate will probably be a cripple for life.

Highway Robbery. Refers to forcible searching or demands for money on public highways. It is interesting to note that of our eight cases in which highway robbery is the principal offense, only three are average-normal intelligence. Examples:

I.Q. 1.11—Held up street car, and assaulted conductor when the latter resisted.

I.Q. .87—Held up a number of drunken men.

I. Q. .73—With boy "gang", held ud and robbed in a systematic way for some time.

Drunkenness. We refer only to extreme cases. Occasional use of alcohol is not included. Examples:

I.Q. 1.22—Was found "intoxicated to insensibility" at 14 years of age. Parents had taught him to drink.

I.Q. .79—In spite of frequent warnings by probation officers, was continually "around town drinking".

I.Q. .58—Highly excitable boy, age 15 years. Would often become intoxicated and threaten violence.

Arson. Refers to intentional burning of buildings. Examples:

I.Q. .77—Burned school building.

I.Q. .64—Burned the barn of a neighbor for revenge.

I.Q. .62—Set fire to several buildings.

Murder. We have but two cases of murder. One, a young man whose exact age is unknown, killed the entire family of his employer. The other case is a boy 13 years of age who assisted his brother in patricide. Neither had committed any other offense.

Intelligence and probability of apprehension. It is sometimes argued that the reason for so large a proportion of feeble-minded among offenders is that the more intelligent are not so likely to be "caught". This is doubtless a factor in explaining the proportion among older criminals who are convicted of a single crime, but can hardly apply to juvenile delinquents. While it is probably true that many of the more intelligent offenders escape detection, it is also true that some feeble-minded persons escape. Our studies of personal histories of juvenile delinquents disclose no important relation between intelligence and the rapidity or manner of detection. Few juvenile offenses are planned, but are merely incidents in general misconduct. For this reason the factor of apprehension is of minor consequence.

Most juvenile delinquents, before being committed to institutions, receive repeated admonitions from the court. It is logical to assume that the effect of these admonitions depends directly upon the intelligence of the offender. This constitutes a weeding-out process which probably more than any difference in apprehension contributes to the relatively low average intelligence of institution cases.

Age at principal offense. The distribution of principal offenses by age is shown in Table VIII. It is interesting to note that the median age for all offenses is approximately the same. The slight deviations in the less frequent offenses would probably disappear if data on a larger number of cases were available. For the most common offenses the median age is 14 years—the median commitment age for the entire group.

TABLE VIII. DISTRIBUTION OF PRINCIPAL OFFENSES BY AGES AT THE TIME OF COMMITMENT.

	JUVENILE GROUP										ADULT GROUP							
Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total	Med.
1. Stealing		1	2	4	7	4	18	19	19	23	6	5	4	2	....	....	114	14
2. Burglary		..	..	2	1	6	14	11	25	22	16	6	6	1	....	....	110	14
3. Larceny		..	1	..	2	1	....	5	12	11	10	5	2	....	....	....	49	14
4. Immorality		..	..	1	4	1	3	4	11	10	3	5	....	....	....	....	42	14
5. Incorrigibility		..	1	1	1	3	3	5	5	12	2	1	2	....	....	....	36	14
6. Dependency	1	..	..	3	3	2	2	2	7	4	....	1	2	....	....	....	27	14
7. Vagrancy		..	..	1	....	1	2	4	9	3	1	1	2	1	....	....	25	14
8. Truancy		..	..	2	....	2	5	3	3	6	....	....	....	....	....	....	21	13
9. Forgery		..	..	..	....	....	2	....	2	6	2	1	1	....	....	....	14	15
10. Assault		..	..	..	....	1	....	3	1	3	1	1	1	....	....	....	11	15
11. Highway Rob.		..	..	..	....	....	....	1	....	2	2	2	1	....	....	....	8	16
12. Drunkenness		..	..	..	....	1	....	1	....	....	2	1	1	....	....	....	6	16
13. Arson		..	..	..	1	....	....	1	2	....	....	1	....	....	....	....	5	14
14. Murder		..	..	..	....	....	....	1	....	....	....	....	....	....	....	1	2	....
Total	1	1	4	14	19	22	49	60	96	102	45	30	22	4	....	1	470	14

CHAPTER VIII. RACIAL DIFFERENCES.

Preliminary note. Throughout this study our cases are discussed and general results stated without referring to racial differences. This is done for two reasons: first, because the problem of delinquency in California is one which involves many social classes and many nationalities, as well as the descendants of three races. No special treatment or separate segration is provided for delinquents of any of these classes, nationalities, or races. The same problems, for correction and training, apply to all. If a boy habitually steals, runs away, or sets fires, it is necessary to place him in custody, whether he is white, colored, or Indian, whether he is American or foreign born, and regardless of the social status of the family from which he comes. It is probable that this will continue to be the case. Therefore, any conclusions which would be of practical value for delinquency in this and other states where similar conditions prevail must be based upon the study of non-selected cases.

The second reason for considering the delinquent population as a whole instead of by races is that we have been thus far unable to find qualitative differences in intelligence which can be attributed to racial influence. Although the races seem to differ in the general levels about which the intelligence of their individual members most commonly fall, there is no general rule which would serve for eliminating the members of any race which would not serve equally well for eliminating individuals for many other reasons. This chapter is written with a view to pointing out what differences have been found, to what extent they modify our individual results, and to explain why we feel justified in grouping our cases as we have. This analysis will also be of use in making our results comparable in detail with the results of other investigations which include one race only.

Extent of racial groups. The racial groups represented among our 470 cases are: (a) White, 72.6 per cent, including members of the Caucasian race only; (b) Mexican-Indian, 15.1 per cent, including persons of Indian or part Indian descent, and (c) Colored, 12.3 per cent, including American born negroes.

TABLE IX. RACIAL COMPOSITION OF OUR 470 CASES.

Race	Number	Per Cent
White	341	72.6
Mexican-Indian	71	15.1
Colored	58	12.3
Total	470	100.0

Of the White group, 94 per cent were born in the United States. The 6 per cent foreign born are mainly from Canada, England, Germany, Greece, Italy, and Russia. All of them speak, write, and understand the English language.

The Mexican-Indian group includes only those who are wholly or in part of American Indian descent. In some cases the nearest pure-Indian antecedants are several generations removed. Of this group, 15 per cent were born in Mexico; 85 per cent were born in the United States. In nearly all cases one or both parents were born in Mexico. Practically all of the Mexican-Indian boys included here have attended school in California or Arizona. All speak, write, and understand English, although many converse easily in Spanish.

The Colored group includes negroes only. All are American born, of native parents, and all speak, write, and understand English.

The proportion of both non-white races is considerably larger among our delinquents than in the general population of California. The United States Census Report for 1910 gave the following for this state:

Mexican-Indian	6.05 per cent.
Colored	0.9 per cent.

Thus Mexican-Indians are more than twice as common, and Negroes nearly fourteen times as common among committed delinquents as in the population of the state as a whole.

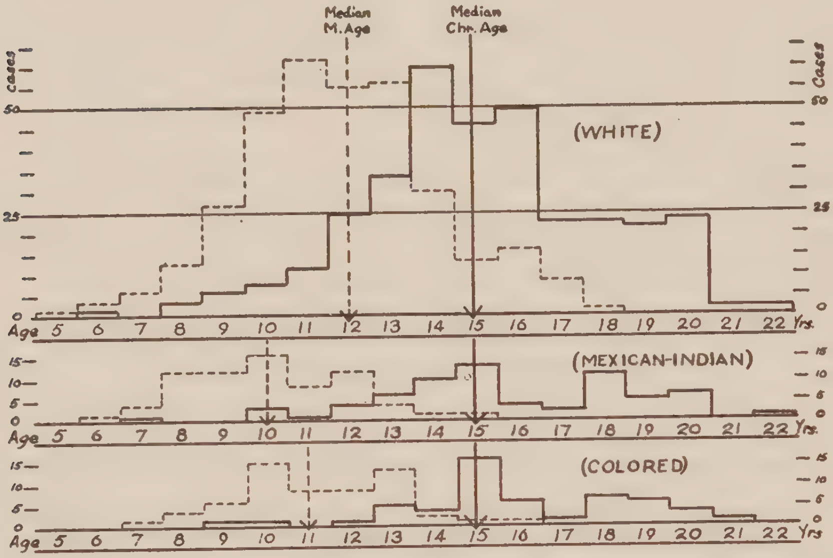

Fig. 22. Distributions of ages and mental ages by racial groups. Continuous lines, chronological ages; broken lines, mental ages.

Distribution of mental ages. Fig 22 shows the relative distribution of chronological and mental ages for each of the racial groups. This analysis is obtained from the data presented in Fig. 1.

It will be seen from these distributions that the Whites range in age from 5 to 21 years; the Mexican-Indians from 7 to 21; the Negroes from 9 to 21. The median chronological age is the same (15 years) for all groups. The median mental age is 12 years for the White group, 10 years for the Mexican-Indian group, and 11 years for the Colored group. Thus in mental age, the negroes as a group fall behind the Whites, and the Mexican-Indians behind the negroes. The relatively lower mental ages of the two latter groups, however, do not affect the median for all groups combined, as Fig. 1 shows the same

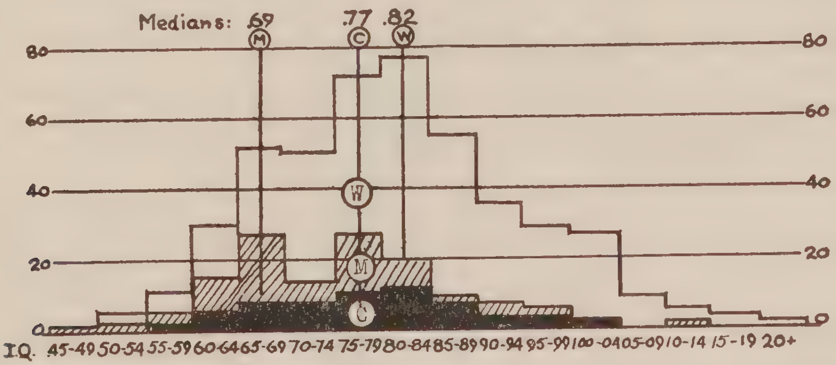

Fig. 23. Distribution of intelligence quotients by racial groups.

medians as are found here for the White group alone. It is further significant that the very lowest mental ages are among the Whites; and that a large proportion of the Mexican-Indians and Negroes exceed the median for the Whites.

Distribution of I.Q's.. Fig. 23 has been prepared by analyzing the data to show the racial distribution of intelligence quotients. Here again the relative superiority of the White group is seen. The median I.Q. for the White group (.82) exceeds that of the Colored group (.77) by 5 per cent, and that of the Mexican-Indian group (.69) by 13 per cent. The median for all groups combined, however (Fig. 2), is but 1 per cent lower than the median for Whites alone. This slight difference represents the effect of leaving our cases unselected, instead of basing our conclusions on the data of the White group alone.

The variability is greatest among the Whites, as might be expected in view of the number of cases. The single instance of a superior I. Q. occurring in the Mexican-Indian group suggests that with large numbers both of the non-white groups would more nearly approach the distribution obtained for the Whites.

Social-intelligence groups. Analyzing the social intelligence grouping by racial composition, we obtain the distribution shown in Table X.

The placing of individuals in these groups, as described in Chapter I, is based solely upon the intelligence quotient and indications of social and industrial fitness. To do this requires the use of standards of judgment which cannot, in the nature of the case, include allowances for general racial differences. It has been pointed out that any term by which a social intelligence group can be designated (e. g. feeble-minded) can be but relative. A number of years ago Binet explained that a man may pass for average intelligence in some of the rural districts of France, and yet be relatively feeble-minded if forced to compete for his living in the more complex social and industrial organization of such a community as Paris. This applies, in a general way, to members of the different races. For example, in the environment from which most of our Mexican-Indian delinquents come, it is probable that an individual whose I. Q. is .90 or above would be considered relatively superior. The same is true, but in a less degree, of

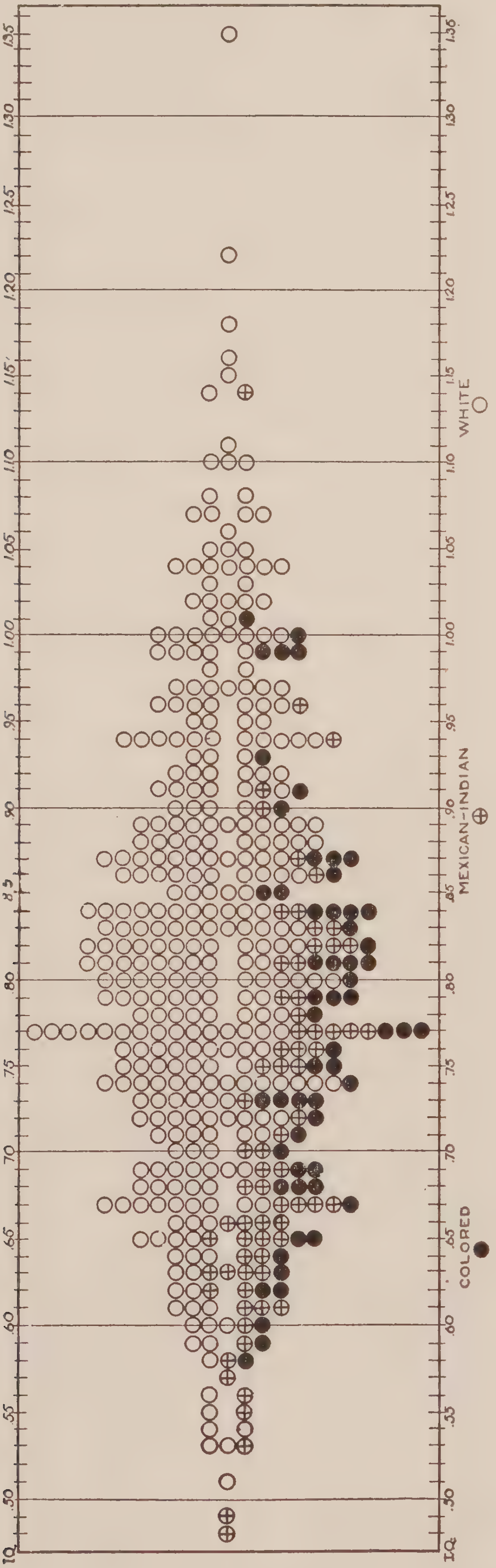

Fig. 24. Distribution of individual intelligence quotients by racial groups.

individuals of the colored group. Probably E. F., colored, (I. Q. 1.00) will meet fewer persons among his colored friends who are intellectually his equal, than would a white boy of the same intelligence quotient, among the individuals with whom he is associated.

Since we know that these general differences exist, it may seem at first thought that we should make allowances for them, by using the term "feeble-minded" in the case of colored boys to describe only those whose I. Q's. are less than, say, .65. Such procedure would need to be explained upon the ground that a colored boy whose I. Q. is .65 is probably as intelligent as a white boy whose I. Q. is .70, if each is judged upon the basis of the average general level for his own race.

TABLE X. DISTRIBUTION OF SOCIAL-INTELLIGENCE GROUPS, BY RACES.

Group	White	Mex.-Ind.	Col.	Total
Borderline	88	21	19	128
Feeble-minded	80	39	22	141
Dull-Normal	78	7	12	97
Average Normal	82	3	5	90
Superior	13	1	0	14
Total	341	71	58	470

There are two reasons why allowances of this kind do not seem justified, at least in so limited a study as this. The first is that if they were, it would be equally necessary to make allowances for different groups of individuals within each racial group. If we cannot compare white boys and colored boys by the same standard, how can we apply a single standard to two colored boys who come from widely different social levels? The father of A, colored, is a minister. He draws a good salary, has a fine home, and the family associates with the best persons in the neighborhood. Can we compare his son with B, whose father is a laboring man, of lazy, "easy going" habits? The I. Q. of A, the minister's son, is .73. The I. Q. of B, the laborer s son, is .83. If we alter our estimate of B's intelligence, rating his higher because he came from an inferior social level, and lower our estimate for A, (which would be necessary, if we wish to be consistent), we would have a greater divergence than is obtained without such alteration.

We should meet a similar difficulty if we attempted to make our standards of comparison equalize the difference between C, Mexican-Indian, whose father came from a poverty-stricken home where the most wretched conditions prevail, with D, Mexican-Indian, whose father holds an important position in international diplomatic service. Equally difficult would we find the making of allowances for the sons of business men with the sons of paupers; boys who have attended city schools with those who are largely self-educated; the selecting, indeed, could be continued until we reached the smallest group possible—the individual.

Yerkes and Bridges (70 p. 87) suggest that, although it would be necessary to use the same measuring scale in each case, it would be well to have norms for the performance of the individuals of each social and racial group. They say: "In the light of our experience with both normal and pathological individuals, we are fully convinced of the practical importance of comparative studies in racial or ethnic psychology. Our city schools as well as our institutions for the criminalistic and the mentally defective or diseased contain individuals of all races and of the most varied hereditary and sociological status. . . . . Only through familiarity with the nature and degrees of mental ability which is characteristic of the sexes, of various ages, races, inheritances, environments, and so on, can the examiner understand and fairly evaluate an individual's performance in a mental examination."

The establishing of these racial and social norms, however, would not permit us to change our conception of such terms as "feeble-mindedness", "average-normal". etc. It is only reasonable to suppose that there may be a relatively larger proportion of feeble-minded in one group, either social or racial, as compared with another. But we are convinced that any English speaking Mexican-Indian boy who tests 10 years mentally by a fair examination is neither more or less intelligent than a white or colored boy of the same mental age. Moreover, if his intelligence does not develop beyond that level, he is just as truly feeble-minded, so far as concerns his relation to the average American community, as a white or colored boy would be under the same conditions. The only possible way in which we can eliminate him from the feeble-minded group is by saying that he would not be considered feeble-minded if he were living among a group of average individuals of his own race. But by the same argument we could reduce our estimate of the proportion of feeble-minded delinquents of the white group; for surely the individuals with whom they have always associated, and with whom they are likely to be associated in the future, are of a lower level of intelligence than that of whites in general. Therefore, it seems a more satisfactory method to classify all of our individuals, of all races and classes, by means of the same standard; and not to overlook intelligence differences among individuals in different social and racial groups, because of any general inferiority or superiority of the groups of which they are members. It remains to be shown to what extent the standards which we have used are satisfactory for purposes of racial comparison.

Analysis of individual test results. The validity of the tests for the comparison of races depends mainly upon the extent to which we are able to test native intelligence. This is a point which cannot be made the subject of discussion here. Whether we have measured native endowment or the results of training need not enter into a discussion of racial differences, where the social levels in each racial group are of approximately equal variability. We have, however, the opportunity for comparison of the races in their relative degrees of performance in the different tests. Such an inquiry is prompted by the desire to know whether the Mexican-Indian group would find tests involving language. such as giving rhymes. interpreting fables, repeating sentences, etc., more difficult than those involving manipulation—such as arranging a series of weights, finding a ball in a circular field, drawing designs, etc. It might be expected, for example, that a Mexican--Indian boy would find the test of giving rhymes for words considerably more difficult than arranging five wooden blocks in order of weight—both of these tests representing, for white children, approximately the same general level of intelligence.

For making this comparison, the tests of all of the boys, of all races and ages, testing between the mental age levels of 11-0 and 12-0 inclusive were tabulated so that the proportion of successful performances for each test could be obtained. The results are given in Table XI. The range of tests include those in years IX, X, XII, and XIV of the Stanford Revision of the Binet Scale. It will be observed that this series includes a variety of tests, in which the subject is given an opportunity to express his intelligence through manipulation, language, numbers, visual imagery, associative reasoning, generalization, orientation, memory, judgment, etc., so that any marked racial differences in intellectual make-up or experience should at least be indicated in an analysis of this kind.

TABLE XI. ANALYSIS OF PERFORMANCES ON INDIVIDUAL TESTS, BY RACIAL GROUPS, FOR ALL CASES TESTING FROM 11-0 TO 12-0 INCLUSIVE.

		White			Mex.-Ind.			Colored			
Yr.	Test	No.	+	%	No.	+	%	No.	+	%	Superiority
IX	Date	25	21	84	5	5	100	5	5	100	None
IX	Weights	66	60	91	11	11	100	10	9	90	None
IX.	Change	57	54	95	12	12	100	9	7	77	W.M.
IX	4 R. Dig.	16	13	81	5	3	60	3	3	100	Col.
IX	Sent.	39	38	97	6	6	100	9	9	100	None
IX	Rhymes	43	29	67	7	3	43	9	5	55	White
X	Vocab. (30)	72	60	83	11	9	82	11	11	100	Col.
X	Absurd.	75	62	83	13	10	77	11	9	82	None
X	Designs	74	57	76	12	9	75	11	10	91	Col.
X	Reading	60	47	78	12	11	92	9	8	88	Mex.
X	Comp.	75	63	84	13	10	77	10	8	80	None
X	60 Words	32	20	63	3	2	67	6	4	67	None
XII	Vocab. (40)	72	21	29	11	1	9	11	1	9	White
XII	Abstract	75	24	32	13	7	54	11	5	45	Mex.
XII	Ball (3)	75	51	68	12	11	92	11	6	54	Mex.
XII	Dis. Sent.	73	23	32	13	5	39	11	3	27	Mex.
XII	Fables	74	31	41	12	8	67	11	4	36	Mex.
XII	5 R. Dig.	74	18	23	13	3	23	11	2	18	None
XII	Pict. Int.	72	34	47	13	7	54	11	8	72	Col.
XII	Similar.	74	43	57	13	7	54	11	6	54	None
XIV	Vocab. (50)	72	1	2	11	0	0	11	0	0	None
XIV	Induct.	61	12	19	11	3	27	11	3	27	M.C.
XIV	P. & K.	69	5	7	12	2	17	11	2	18	M.C.
XIV	Pr. Fact	74	24	31	13	5	39	11	4	36	None
XIV	Arith.	67	4	6	12	0	0	11	1	9	W.C.
XIV	Clock	72	20	28	13	3	23	11	4	36	Col.

The vertical columns for each race include the number of individuals given each test, the number of "plus" or correct responses, and the percentage of correct responses. The extreme right hand column of the table indicates whether, for each test, there is (none) no superiority of any racial group; (White) an indicated superiority of the White group; (Mex.) an indicated superiority of the Mexican-Indian group, or (Col.) an indicated superiority of the Colored group. Close agreement is indicated in 10 tests, superiority of the Whites in 2 tests, superiority of the Mexican-Indians in 5 tests, and superiority of the Colored group in 5 tests. In 4 cases the close agreement of two groups and a relative inferiority of the third has been indicated. Two of these represent superiority of the two non-white groups; in the remaining two cases the Mexican-Indian and Colored groups are each indicated once with the White group.

From this analysis it would appear that so far as these cases are concerned there is no difference sufficiently consistent to indicate a qualitative racial difference, or to justify the assumption that either of the non-white groups is at a disadvantage because of the "kind of intelligence". If the relative proportion of successful responses were an indication, these data would suggest that the Whites, if any, were at a disadvantage. For example, both non-White groups excel the Whites in the X-year vocabulary index, drawing designs, reading, defining abstract terms, arranging dissected sentences, and interpreting fables. Some of these, surely, would show a superiority of the Whites if the tests were unfair for some reasons which have at times served as a basis for serious criticism.

The number of Mexican-Indian and Colored cases is too small to justify general conclusions concerning the validity of the tests for fully comparing the intelligence of individuals of different races. We believe, however, that we are justified in concluding that in these cases Mexican-Indian 11-year intelligence is not qualitatively different from White or Colored 11-year intelligence; and that as far as such differences, if present, would act in modifying our results, boys of equal mental ages are intellectually equal, whether they belong to the White, Colored, or Mexican-Indian group.

It should be remembered in this connection that the Binet-Simon tests are not intended to test the different mental functions separately, nor can we assume that any single test is a satisfactory measure of any separate function, faculty, or process. Those included in the intelligence scale have been selected for the most part because of their significance for placing the general level of intelligence. They do, however, represent widely different ways in which the general level of intelligence may be expressed, and to this extent may be considered qualitatively different.

This conclusion is especially significant for intelligence grouping. If A, White, who is 18 years of age, tests 10-0, and B, Mexican-Indian, age 18, tests 10-0, we may with equal fairness classify them as feeble-minded; provided, of course, the supplementary data are sufficiently in accord with the test results. It is true that there are more individuals of B's race who would have a similar I. Q. than would be found in the racial group which A represents. We may, therefore, if we wish, say that B is nearer average for his race than is A for his race. To base an estimate of his intelligence on such a basis, however, would involve the difficulties to which reference has already been made.

TAPLE XII. DISTRIBUTION OF PRINCIPAL OFFENSES, BY RACIAL GROUPS.

	Feeble-Minded			Border-line			Dull-Normal			Average Normal			Superior			All			Tot.
	W	M	C	W	M	C	W	M	C	W	M	C	W	M	C	W	M	C	
1. Stealing	20	8	3	20	5	6	21	1	1	22	2	2	2	1	..	85	17	12	114
2. Burglary	16	13	8	21	6	3	17	3	2	17	1	2	1	..	..	72	23	15	110
3. Larceny	7	2	2	4	1	2	12	2	4	8	..	..	5	..	..	36	5	8	49
4. Immorality	10	4	3	8	1	1	7	..	1	7	..	..	..	..	..	32	5	5	42
5. Incor'blty.	6	2	2	8	..	..	10	1	..	7	..	..	..	..	..	31	3	2	36
6. Depend'cy.	5	4	..	8	3	..	4	..	..	2	..	..	1	..	..	20	7	..	27
7. Vagrancy ..	5	..	2	8	..	..	3	..	1	5	..	1	..	..	..	21	..	4	25
8. Truancy	2	2	1	3	2	..	2	..	2	6	..	..	1	..	..	14	4	3	21
9. Forgery	..	..	1	4	1	2	1	..	1	4	..	..	..	..	..	9	1	4	14
10. Assault	4	1	..	..	1	2	..	..	..	2	..	..	1	..	..	7	2	2	11
11. High. Rob...	1	1	..	1	..	2	..	..	..	2	..	..	1	..	..	5	1	2	8
12. Drunk'ness	1	..	..	2	1	..	1	..	..	..	..	..	1	..	..	5	1	..	6
13. Arson	2	1	..	1	..	1	..	..	..	..	..	..	..	..	..	3	1	1	5
14. Murder	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2
Total..........	80	39	22	88	21	19	78	7	12	82	3	5	13	1	..	341	71	58	470

Offenses. An analysis of the principal offenses, with dependency, is given in Table XII. In this distribution we find no striking racial differences. There are no particular offenses which are especially common to any racial group. The order of frequency for the White group is exactly the same as for all groups combined. This, of course, would be expected, in view of the predominance of White cases. It is interesting to note that there are no cases of dependency in the Colored group, although dependency ranks seventh for the White group and third for the Mexican-Indian group as the principal reason for commitment. We could hardly attach any special significance to this occurrence, in view of the broad legal meaning of dependency.

TABLE XIII. RELATIVE FREQUENCY OF PRINCIPAL OFFENSES, BY RACIAL GROUPS.

	All	W	M	C
Stealing	1	1	1	2
Burglary	2	2	1	1
Larceny	3	3	4	3
Immorality	4	4	5	4
Incorrigibility	5	5	7	8
Dependency	6	7	3	....
Vagrancy	7	6	....	5
Truancy	8	8	6	7
Forgery	9	9	9	6
Assault	10	10	8	9
Highway Robbery	11	11	10	10
Drunkenness	12	12	11	....
Arson	13	13	12	11
Murder	14	14	13	....

Taking the offenses of greatest frequency, we find ranking first, stealing, burglary, burglary, for White, Mexican-Indian and Colored groups respectively; ranking second, burglary, stealing, stealing; third, larceny, dependency, larceny; fourth, immorality, larceny, immorality; fifth, incorrigibility, immorality, vagrancy; etc. The relative similarity of the rankings, considering the small number of cases in the non-White groups, suggests little influence of race in the commission of any single offense. Offenses against property are most common in each group, just as in all groups combined.

School progress. The distribution of grades reached (Table XIV) shows that the median grade reached for all groups is VI. The Whites show no superiority over the Colored group, but they both have made better progress, by two grades, than the Mexican-Indians. There are no cases in the Mexican-Indian group having progressed farther than the eighth grade, and nearly 50 per cent are in the first three

TABLE XIV. DISTRIBUTION OF GRADES REACHED IN SCHOOL, BY RACIAL GROUPS. MEDIANS INDICATED BY (*).

Grade	White	Mex.-Ind.	Colored	Total
X	8	----	1	9
IX	13	----	1	14
VIII	53	6	5	64
VII	58	3	12	73
VI	59*	12	11*	81*
V	55	10	6	72
IV	41	12*	14	69
III	26	12	4	40
II	11	8	2	21
I	11	6	1	18
0	1	1	----	2
Ungraded	5	1	1	7
Total	341	71	58	470

TABLE XV. DISTRIBUTION OF CHRONOLOGICAL AGES OF FEEBLE-MINDED CASES, BY RACIAL GROUPS. (*MEDIANS).

Age	White	Mex.-Ind.	Col.	Total
21	3	1	2	6
20	6	4	2	12
19	4	3	2	9
18	8	6	3	17
17	6	2	1	9
16	16*	3	4*	23*
15	10	6*	4	20
14	15	4	1	20
13	5	6	2	13
12	5	3	1	9
11	1	----	----	1
10	----	1	----	1
9	1	----	----	1
Total	80	39	22	141

grades. It is difficult to explain this scholastic retardation entirely by reason of intellectual inferiority, in view of the similarity of distribution for the Colored and White groups. The language difficulty, if there has been any, might show in school progress, notwithstanding our failure to find its influence in intelligence tests. At any rate the relative pedagogical retardation of the Mexican-Indian group closely accords with the retardation indicated by the tests. Reports of teachers on the learning rate of Mexican and Indian children suggest that their school progress is a fair index of their general adaptability and social adjustment.

Age and feeble-mindedness. In order to see if any relation existed between chronological age and race in the feeble-minded group the data in Table XV were prepared. Our Mexican-Indian feeble-minded boys are slightly younger than the White and Colored boys of the same social-intelligence group, the median age of the two latter being the same. The medians occur so nearly together that the distribution may be said to be practically the same

CHAPTER IX. HEREDITY IN RELATION TO INTELLIGENCE AND DELINQUENCY.

Is delinquency inherited? The subject of the inheritance of criminality[1] has been more often a question for theoretical discussion than a problem for scientific investigation. As in many other social problems, heredity bears a very close relation to crime and delinquency. But no one as yet has shown that the tendency to crime is in itself an inherited trait.

Aschaffenburg (2, pp. 124-129) has summarized the investigations of Suchart, Marro, Penta, Hartmann, Kurella, Sighele, Monkemoeller, and others. In all of these studies criminality is shown to be greatly affected by heredity, but indirectly—i. e. through feeble-mindedness, insanity, etc. There is no evidence that criminality in itself is ever inherited. Even Sighele's study showing the high degree of criminality which existed for centuries in the outlawed state of Artena "does not", says Aschaffenburg (p. 127) "prove the hereditary character of criminality itself. It may equally as well be attributed to the unfortunate force of example, that smothered good impulses before they could be developed".

It is probable that criminality in Artena was greatly influenced by feeble-mindedness, insanity, and other traits which we know are heritable, and which bear a close relation to the problems of crime and delinquency everywhere.

Aschaffenburg's summary leads him to conclude (p. 129) that "this makes it possible to dispense with the hypothesis that criminal tendencies, like artistic talents, for instance, are transmitted from parents to children. I expressly say that we can dispense with it, for it cannot be refuted or proved."

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[1] For purposes of the study of inheritance, "criminality" and "delinquency", are synonymous.

Spaulding and Healy (52) in a study of one thousand cases of young repeated offenders found no conclusive evidence of hereditary criminalistic traits, as such. "Of course, we cannot absolutely deny such inheritance, but judging from our studies, we feel that careful observation elsewhere will forward evidence rather against such a theory than in favor of it."

The method followed by Spalding and Healy was as follows: Of the 1000 cases with which the start was made, those were eliminated which showed evidence of no prior criminality in the family; from the remainder were eliminated those which showed evidences of epilepsy or mental defects; from these further elimination was made of all cases where other facts were in evidence to clearly explain the criminality.

Total number of cases	1000
No. having sufficient data for evaluation of casual factors	663
Eliminated because no previous criminality in family 271, leaving	397
Eliminated because of evidence of epilepsy or mental defects, 245, leaving	152
Eliminated because offenders were distinctly psychopathic or neuropathic, 42, leaving	110
Eliminated because offender was victim of faulty development factors, 3, leaving	107
Eliminated because of extremely faulty environment, 61, leaving	46
Eliminated because of inherited defects plus bad environment, 17, leaving	29
Eliminated because of bad environment plus faulty development, 2, leaving	27
Eliminated because of evidence of peculiar mental characteristics, not hereditary, 3, leaving	24
Eliminated because of complex factors, but outside of criminalistic heredity, 9, leaving	15

This elimination left 15 cases in which to look for inherited criminalistic traits. In every case, however, other factors were found which very plainly predominated. "Peculiar outbursts of temper, hypersexualism as a prevailing trait, premature puberty, lack of general mental and moral energy, excess of energy, and lack of mental and moral inhibitions, each figures as the main cause of delinquency in the individual". Some of these traits were found to be due to heredity, and some not. Some, the authors state, could, under favorable circumsances, as easily make for genius as they have here for delinquency.

Following the method of Spaulding and Healy we have analyzed 300 families[2]. Of these there are but 82 which contain two or more persons who can be described as criminal, delinquent or potentially delinquent. These 82 families constitute 27.3 per cent of the total. From these 82 cases the following eliminations were made:

Because of feeble-mindedness, or epilepsy, 59 cases, leaving	23
Because of insanity, or high degree of excitability, including violent temper, 11 cases, leaving	12
Because offense can be traced to the incapacity to inhibit the wandering impulse, 4 cases, leaving	8
Because of extremely unfavorable home conditions[3], 2 cases, leaving	6

Descriptions of these six remaining families follow:

Family 1. In this case two of the offenders are first cousins. Both have been committed to Whittier State School. The boy we examined was 10 years of age, I.Q. .87. He was a persistent truant, and "a confirmed thief" according to the report of the probation officer, who says: "I believe his tendency to thieving is inherited from his parents, and more particularly from his father's side". The father, who is said to have shown criminal tendencies, is a painter and separated from his wife. This boy is their only child. The other offender, the cousin, was not examined. His offenses were "incorrigibility and frequenting questionable resorts".

Family 2. Two brothers, both committed to Whittier State School. Good home, father a laborer of good character. (a) Age 14-3. I.Q. .91. Offenses, larceny, burglary, vagrancy. (b) Age 16-0. Offenses, larceny, burglary, vagrancy. Both boys inclined to associate with tramps.

Family 3. Two brothers, both committed to Whittier State School. (a) Age 15-5. I.Q. .87. Truancy, incorrigibility, stealing. Sullen and stubborn. (b) Age 12. I.Q. .98. Had scarlet fever when young, "which left him in a nervous state." Often a truant, expelled from school. Incorrigibility, stealing, untruthful. Two other children in the family. Neither has given any serious trouble. From the probation officer's report: "Home life poor. Father too harsh, mother too lenient. Disagree on discipline of children."

Family 4. Colored family. Two boys, half-brothers, committed as delinquents. Father was born in slavery and ran away from his master when he was 9 years of age. Was of a wild, roving disposition. Was in the army for several years. Became first sergeant. Since retiring from army has been a street worker and janitor. Is now janitor in a Federal building. Has been alcoholic, but is now an abstainer. Nearly all of his known relatives were slaves. His mother was an illegitimate child. His oldest son was committed to a reformatory upon a charge of stealing. Younger son committed to Whittier State School at 15 years of age. I.Q. .81. Borderline case. Offenses, stealing and truancy. Is of a roving disposition. His mother is probably feeble-minded. A daughter, said to be "like her mother; not very quick at learning". The home is neat and well-kept, and is located in a good neighborhood.

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[2] Family includes the boy who has been examined and all of his relatives concerning whom information has been obtained.

[3] In these cases **all of the children** in the family had shown the influence of degraded conditions. See Chapter X for discussion of the relation of home conditions to delinquency.

Family 5. Colored family. Father was a laborer, now dead. Two boys, brothers, committed to Whittier State School. Burglary and habitual truancy in both cases. Older brother now dead, killed in an accident. Younger brother committed at 14 years of age. Age when examined, 19-2. Mental age 13-0. I.Q. .81. Borderline. Reached sixth grade in school. No other cases of delinquency or criminality found in the family.

Family 6. Mexican family, high grade. Father held a responsible position in international diplomatic service. Two sons committed to Whittier State School. No other cases of delinquency or criminality found in family. Older boy committed at 13 years of age. Not examined, but probably of nearly average-normal intelligence. Sullen disposition. Offenses, burglary, stealing and incorrigibility. Younger boy: Age when examined, 13-5. Mental age 12-2. I.Q. .91. Average-normal group. Offenses, stealing, truancy. Left home, he says, on account of older brother's abusiveness. Became associated with another boy, when the thieving began. Later, while on parole, returned for stealing.

Since the causes of delinquency in individual cases cannot be determined at the present time with any degree of reliability, we must refrain from attempting to analyze the foregoing more closely. It is evident that in no case is there any striking characteristic which could serve as a definite explanation. None of these boys (at least among those who have been examined) is definitely feeble-minded. Two are borderline cases (I.Q. .81) and of a level of intelligence which might be interpreted by some investigators as indicative of feeble-mindedness. Perhaps case 4, where two other members of the family are probably feeble-minded could be explained away, but it should be noted that the **home conditions are good.** In case 3 delinquency on the part of the younger brother might be explained by the condition supposed to have resulted from fever. But these same conditions are also found in the older brother, who is not known to have had such an illness. The home conditions in this case were probably below average, and they are more likely to have caused the delinquency of the boys than is the delinquency to have resulted from traits inherited through the father. In case 1 we have more evidence than in any other upon which to base an assumption of inheritance of delinquency. At least such an explanation would be supported by facts to a much greater extent than are many of the commonly supposed cases. It is not at all conclusive, however, and it is possible that the force of example in this family may be sufficiently strong to overbalance the evidence of heredity.

Excepting case 1, no two offenders in any family occur in succeeding generations. All are offspring of persons who are not known to have been criminally inclined. It is still possible, however, that the delinquency may have been a direct result of inheritance. Applying the "factorial hypothesis" (Morgan, 40, p. 208 ff.) to human inheritance it is possible that the tendency to delinquency may be a character which is "the product of a number of genetic factors and of environmental conditions". Thus, numerous individuals in previous generations may have carried the same hereditary factors, but not in the combinations which are most likely to produce delinquency. This hypothesis would, of course, serve also as an explanation of delinquency in families where there is but a single case; but the presence of two or more offenders in the same generation, with the lack of evidence for any other explanation, increases the probability that the hypothesis may stand.

Of the inheritance of delinquency in the sense in which it was sought by Spaulding and Healy, we have but one, and that an uncertain case, and this is but one of 300 families. Even if this could be conclusively proved, the resulting proportion would be negligible for practical purposes. We may conclude then, that if inheritance is a true cause of delinquency, it must be due to the way in which inherited factors are combined in certain individuals.

Inheritance of related factors. The fact that 30 per cent of our cases are feeble-minded, and that more than 50 per cent are below average-normal intelligence, is quite significant for a consideration of inheritance. The great majority of these children of the different relative levels of intelligence have come from families where the same levels are common. Approximately 67 per cent of our feeble-minded boys have come from families in which there are other feeble-minded persons. About 50 per cent of those who are highly excitable have highly excitable relatives. Similar proportions are found for other traits which are contributing factors in delinquency. In some of the families there is evidence that the capacity for inhibiting certain undesirable tendencies has been consistently weak among the members.

It is certain that stock from which delinquent children have come is decidedly more ''tainted'' with socially undesirable traits than is the stock from which ordinary children come. Of 300 families covered by our field-work, information has been secured concerning 3871 individuals who are related to the delinquent boys included in this study. We are not concerned here with all of the traits which have been found, but only those which have a direct bearing on the relation of social conduct to intelligence. The following summary shows the extent to which some of the traits studied have been found in the population which has produced these delinquent boys:

Number of families	300
Total number of persons	3971
Male	2290
Female	1681
Committed to Whittier State School	308
Committed to other institutions	54
Known to be of normal intelligence	635
Known to be of superior intelligence	17
Known to be feeble-minded	298
Known to be alcoholic	209
Known to be insane	18
Known to be highly excitable	91
Known to be criminal[4]	23
Known to be tubercular	68
Known to be sexually immoral	159
Classified as potential delinquents	40
Stillborn, or died in early infancy	58

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[4] Does not include persons classified as delinquent. A group of the "criminally inclined" might be made by adding the number of delinquent, criminal, and potentially delinquent persons. This totals 421, or approximately 11 per cent of the whole.

Heredity and feeble-mindedness. Of 950 persons (in the foregoing summary) of known intelligence, we have the following proportions:

Average-normal intelligence	635 cases	66.8 per cent
Superior intelligence	17 cases	1.8 per cent
Feeble-minded	298 cases	31.4 per cent
Total	950 cases	100.0 per cent

We find a proportion of feeble-minded persons (31.4 per cent) among the families of delinquent boys which is strikingly similar to the proportion found among the delinquent boys themselves (30 per cent). To what extent this is due to the hereditary transmission of feeble-mindedness, we have not yet sufficient data to determine. We cannot be certain that such transmission has taken place in all cases where two or more members of the family are feeble-minded, although such an occurrence is not likely to be a coincidence. Goddard found that approximately 66 per cent of the cases which he investigated could be reasonably attributed to heredity. A more recent report from the laboratory under Dr. Kuhlmann, at Faribault, Minnesota, states that approximately 75 per cent of the feeble-mindedness represented by the inmates of that institution can be explained by inheritance of mental defect.

Whatever proportion may be a direct product of heredity, our data show not only that feeble-mindedness is more common among delinquent boys than among public school children (probably 15 to 18 times as common) but that there is a contrast of similar proportions between the families of delinquent boys and the general population. This is based upon the assumption that the school children who have been measured for this purpose constitute a sufficiently representative body.

A number of family charts are shown here which may serve to indicate the prevalence of feeble-mindedness in the families of delinquent boys. An interesting fact in this connection is that in some cases the boy himself is not feeble-minded, but has come from surroundings which are almost invariably a consequence of feeble-mindedness of the parents or other relatives. In some cases there has not been sufficient feeble-mindedness in the family to assure us that the defect has been transmitted. In other cases this is more certain. The families may be summarized as follows:

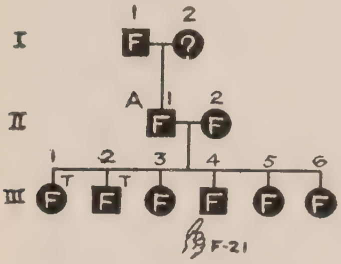

Fig. 25. Family of F-21.

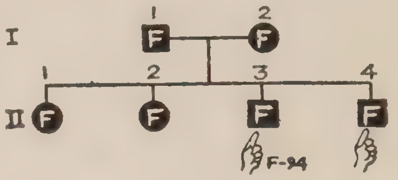

Fig. 26. Family of F-94.

Fig. 25 and Fig. 26 show groups of persons all of whom are defective.

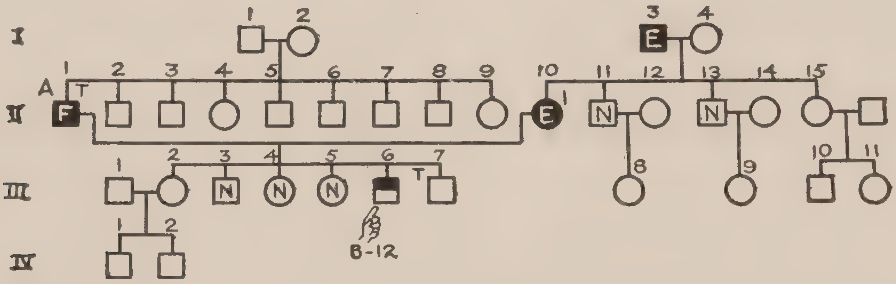

Fig. 27. Family of B-12.

Fig. 27 shows a delinquent boy of borderline intelligence, in a family of children, most of whom are apparently normal, but of a feeble-minded father and epileptic mother.

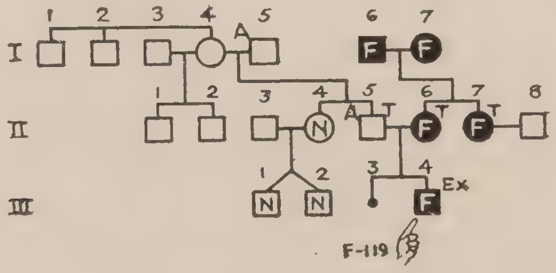

Fig. 28. Family of F-119.

Fig. 28 shows a feeble-minded delinquent boy who is an offspring of parents, one of whom is feeble-minded, from feeble-minded stock, and one alcoholic and tubercular, but from apparently normal stock.

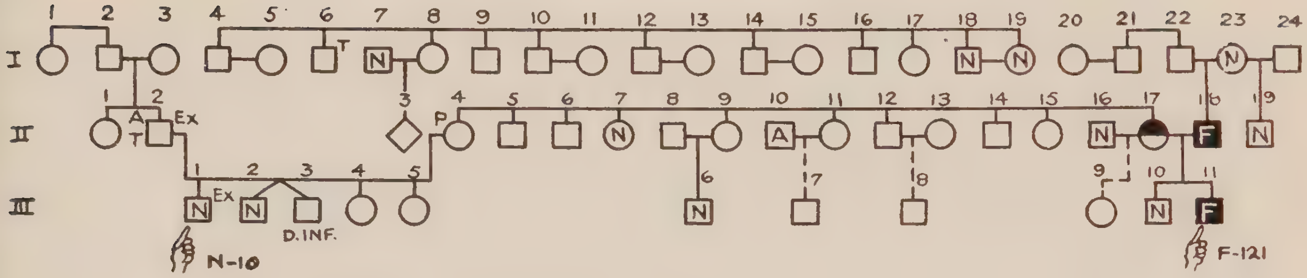

Fig. 29. Family of F-121 and N-10.

Fig. 29 shows one feeble-minded and one normal boy of feeble-minded and borderline parentage. The feeble-minded boy became delinquent.

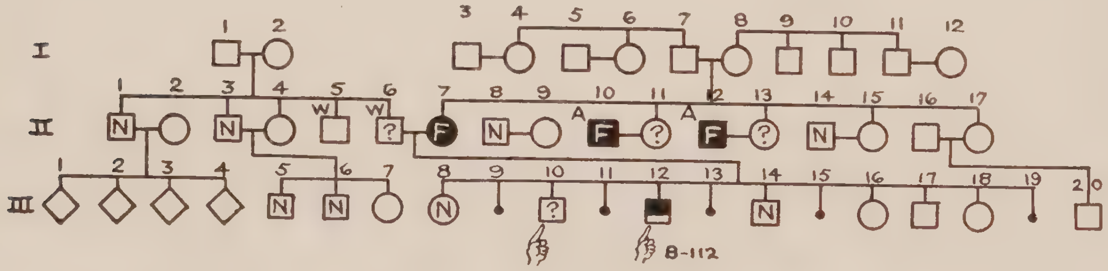

Fig. 30. Family of B-112.

In the family shown in Fig. 30, a man who may be feeble-minded, produced by his feeble-minded wife eleven children, five of whom died in infancy, and two of whom (one a dull-normal) became delinquent.

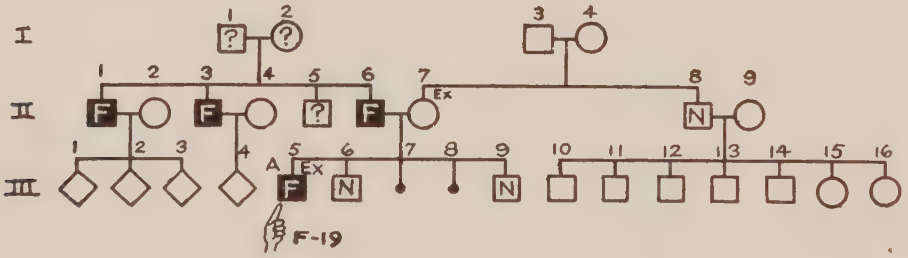

Fig. 31. Family of F-19.

Fig. 31 shows a feeble-minded man mated to an excitable, but probably normal woman. Of their five children one was feeble-minded and delinquent; two were normal; two died in infancy.

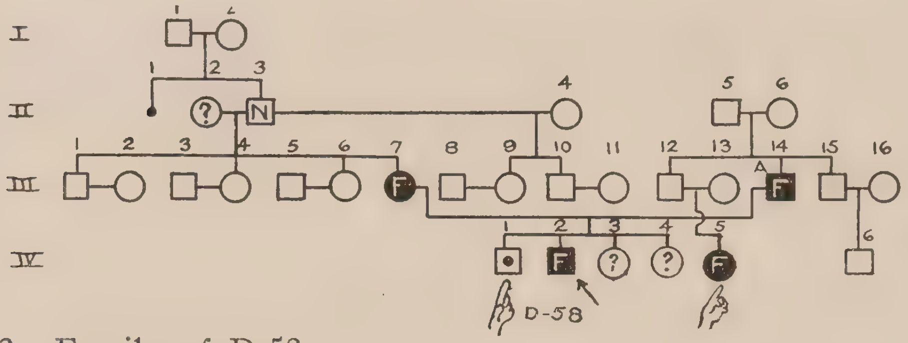

Fig. 32. Family of D-58.

Fig. 32 shows a case of one dull-normal, and one probably feeble-minded, and two feeble-minded children produced by feeble-minded parents. It is interesting to note here that the oldest of these children became delinquent, although apparently of the highest intelligence in the family.

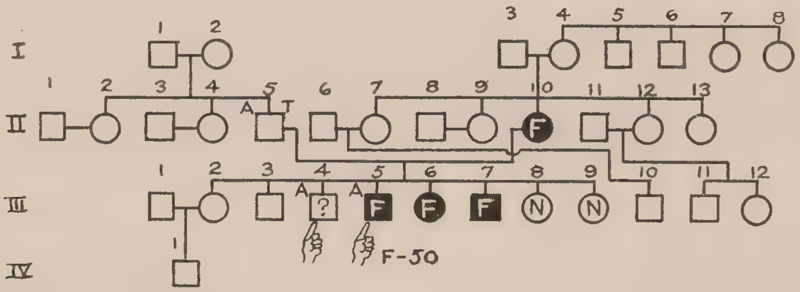

Fig. 33. Family of F-50.

In Fig. 33 the mother of the boy is known to be feeble-minded, but little is known of the father's side. There were three feeble-minded and one doubtful of eight children. Two were delinquent.

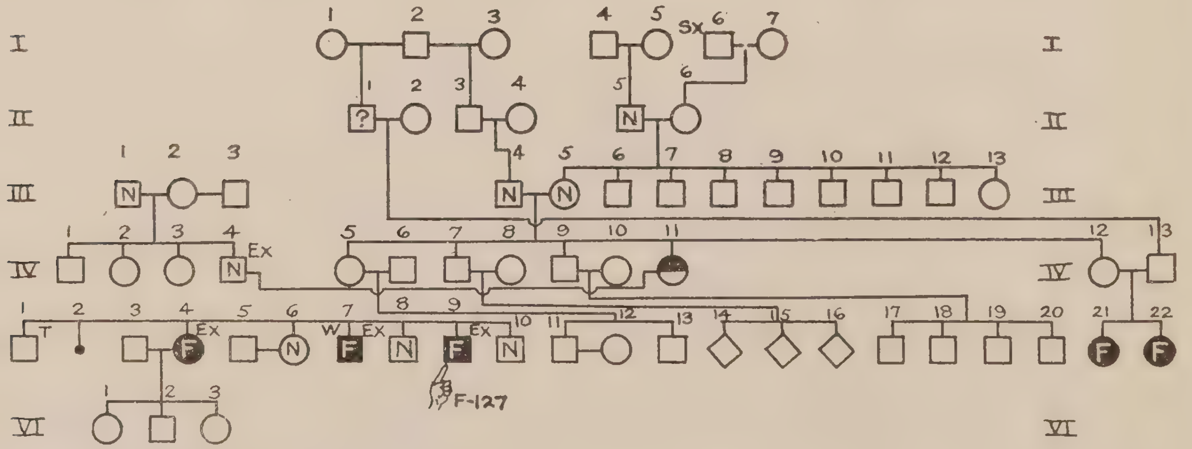

Fig. 34. Family of F-127.

In Fig. 34 the father is normal, but highly excitable. The mother is of borderline intelligence as nearly as can be determined by the field-worker. Of their ten children, three were feeble-minded and highly excitable. One became delinquent.

While these families are not sufficiently complete to serve as material for inquiry concerning herediary laws, they illustrate the fact that many of our delinquent boys come from families where social misconduct may be explained by inherited disgenic factors. Whether a boy himself is feeble-minded is of little consequence in explaining his delinquency if one parent is feeble-minded, or if the intelligence of his parents is such that the family is certain to locate in unfavorable surroundings. The presence of even one feeble-minded individual in a family may indicate a weakened stock of which the delinquent conduct of any child may be an expression.

Insanity. Of the 470 cases of delinquents committed to institutions, four have been adjudged insane. There are many more cases, however, bordering closely upon insanity, or who show indications of developing some form of mental aberration. In other cases the presence of insanity or other nervous disease in the family has been found related to the delinquency of boys who themselves are not neuropathic. Healy (32, p. 240) points out that the relation between mental instability and delinquency is not given sufficient attention, owing to the fact that many cases ''may not be classified under the head of any of the text-book types of mental diseases.'' He further states: ''It is clear that for the protection of society a different notion of what constitutes mental aberration or insanity should prevail, so that these unusually dangerous types (cases described by him) might be permanently segregated.''

Following are some examples of our insane and near-insane cases:

(a) I.Q. .55: (See Case F-10). Committed to asylum. Threats of violence. Extremely nervous and irritable. Hallucinations. Extremely talkative. Many imaginary schemes discussed.

(b) I.Q. .59: Violent fits of temper, especially when under influence of liquor. Makes threats at all times.

(c) I.Q. .64: School physician diagnoses case as "nervous insanity". Jumped from car window of moving train. Says he is unable to control his actions.

(d) I.Q. .69: Subject to sudden and violent fits of temper. Extremely nervous. Very irregular in tests, but obviously feeble-minded as well as insane. Committed to asylum. Mother easily "flies off" when irritated. (See Fig. 35).

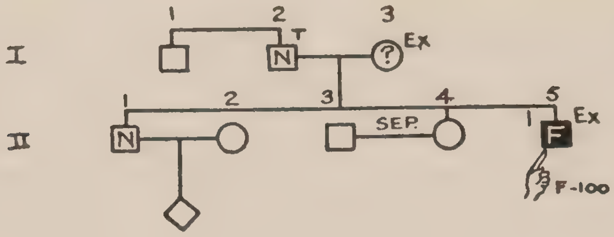

Fig. 35. Family of F-100.

(e) I.Q. .77: Age 8. Kleptomaniac. Exceedingly difficult to keep from stealing things. Habit strong for a child of this age. Has two brothers, both delinquent. Mother is "queer".
(f) I.Q. .79: Flies into a rage with profuse flow of profanity. At other times calm and steady.
(g) I.Q. .82: Has hysterical fits. Very nervous.
(h) I.Q. .86: Victim of drug habit. All offenses traced to this cause.
(i) I.Q. 1.01: Bright boy at times but lapses into extreme absurdity. Father had violent temper.
(j) I.Q. 1.02: "Out of his head" at times.

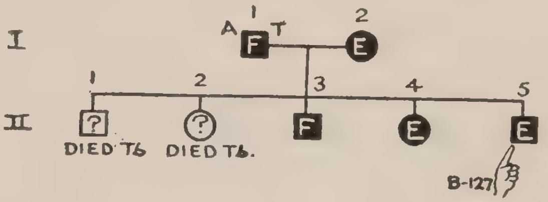

Fig. 36. Family of B-127.

Epilepsy. We have but one case of marked epilepsy, and that is obviously inherited. (See family in Fig. 36). This boy's conduct was extremely bad. His attacks were usually preceded by some irritation and signs of anger. His principal offense was stealing. He is now 18 years of age and at large. This is an unusually defective family.

Excitability. By this we mean extreme nervousness, but not of the form which is usually considered as bordering on insanity. The difference, however, is more in degree than in type. "Excitable" persons are sensitive, irritable, and easily disturbed. The nervousness is sufficiently marked as to handicap them in their ordinary duties. "The most significant symptoms," says Terman,[5] "are emotional and volitional. The nervous child is apt to be unstable in its emotional life, easily turned from laughter to tears, quick to anger, irritable, peevish, etc. There is constant hunger for excitement, and distraction is sought in a variety of stimulation. The child is not happy without an array of playthings or occupations. Numberless idiosyncrasies may develop, involving habits of play, work, dress, eating, etc. The eccentric child is always a nervous child. Sleep is usually affected. The child has difficulty in getting back to sleep, wakes easily, has night terrors, gets up peevish, etc. . . . . . Nervous children are usually oversensitive to the opinions of others, unable to endure blame, and constantly hunger for praise. . . . . . The sexual emotions may be prematurely or abnormally developed."

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[5] "Hygiene of the School Child", pp. 292-293.

The relation of these characteristics to delinquent conduct is obvious. One could hardly expect normal behavior under the conditions enumerated in the foregoing description. The tendency to steal, to break into houses, to commit sex offenses, to be incorrigible—all may be well explained in the case of the extremely nervous child of any grade of intelligence. When the condition is accompanied by feeble-mindedness the chances of misconduct are greatly increased.

The occurrence of excitability as a prevailing mood has been discussed by Davenport (16) with special reference to the transmission of the trait through feebly inhibited human stock. The families of many delinquent boys, especially extreme cases of incorrigibility or violent conduct, show strains similar to those found by Davenport.

Of our 470 cases, 42 per cent have been diagnosed by the school physician as being extremely nervous. Great care was taken to make these diagnoses conservative, a period of observation preceding a second verifying diagnosis in each case. This proportion is much larger than has been found among public school children. In the Salt Lake City school survey it was found that 10 per cent of the school children were noticeably nervous according to the observations of teachers. Assuming this to be a representative proportion, extreme nervousness is apparently more than four times as common among delinquent boys as among non-delinquent children.

The following are examples of extremely nervous delinquents:

(a) I.Q. .72: Stubborn. Lazy. Likes to be given authority, but unable to have much exercised over him. Selfish. Steals small articles.

(b) I.Q. .72: Vivid imagination. Obviously feeble-minded. Continually in motion. Incessant talker. Dreams much. Mind wanders.
(c) I.Q. .83: Sex pervert. Unreliable. Changeable. Cannot stay long in one line of work. Often needs reprimanding for disobedience.
(d) I.Q. .84: Habitual runaway. Has a good home, but prefers sleeping in sheds, alley-ways, hay-stacks, etc. Craves excitement.
(e) I.Q. .87: Stubborn, irritable. Often refuses to dress himself. (Age 15). Continually "picking" a fight.
(f) I.Q. .94: Sex pervert. Probably syphilitic. Said to be quick to learn.
(g) I.Q. .96: Strong tendency to steal. Bright appearing. Easily irritated.
(h) I.Q. 1.22: Quick temper. Easily angered Bright, quick, but unruly. Thinks everyone has a "grudge" against him.

Alcoholism. The term ''alcoholism'' is very unsatisfactory, because of the difficulty of finding a commonly acceptable definition. Following the method of Goddard (25) we have considered as ''alcoholic'' only those persons who are known to often become intoxicated. This limitation necessarily excludes a large number who probably drink to excess, and who are doubtless seriously affected by their drinking. With a view to conservatism, however, Goddard's definition will serve the present purpose.

Of 300 families covered by field work 111, or 37 per cent, contain one or more alcoholic persons. In 47 cases, or 41 per cent of our alcoholic families, the boy himself is alcoholic. This represents 14 per cent of the total number of delinquent boys reported on with reference to alcoholism.

Following is the distribution of families as regards the number of alcoholic persons found in each:

1 person alcoholic	63 families
2 persons alcoholic	26 families
3 persons alcoholic	6 families
4 persons alcoholic	6 families
5 persons alcoholic	5 families
6 persons alcoholic	1 family
7 persons alcoholic	2 families
8 persons alcoholic	1 family
12 persons alcoholic	1 family
Total, 209 alcoholics	111 families

These 209 persons represent 9 per cent of the total male population studied. But this percentage is far too small as an estimate of the proportion of alcoholics among the male relatives of delinquents. Alcoholism is often the most difficult trait to establish in connection with personal information, and hence there are in all probability many cases not yet recorded. Further data will be published in the near future.

We find no marked relation between intelligence level and alcoholism. Of 47 cases of alcoholic delinquent boys, we have the following distribution, in which the proportion for each group is not greatly different from the proportions found in the total delinquent population:

Feeble-minded	17 cases
Borderline	13 cases
Dull-normal	8 cases
Average-normal	8 cases
Superior	1 case
Total	47 cases

With our small number of cases these figures should be interpreted only as indications and not for purposes of general conclusions. In no way may they be taken as showing the extent to which alcoholism is or is not a causative factor in delinquency.

In some of the accompanying family charts alcoholism is shown in combination with both normal intelligence and feeble-mindedness.

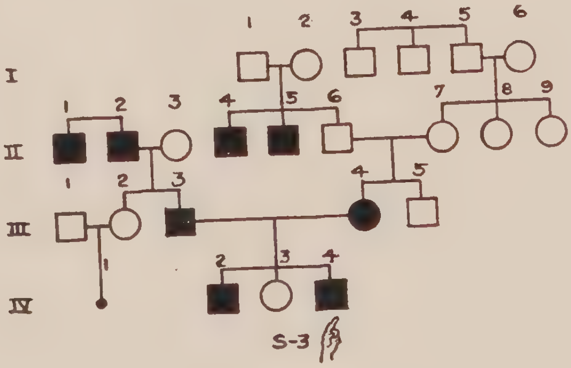

Fig. 37. Family of S-3, showing inheritance of nomadism.

Nomadism. The inheritance of nomadism in relation to delinquency has been discussed by the writer (64). An analysis of the families of 24 truants showed 30.4 per cent of the relatives to be nomadic, while the families of a group of 24 non-truant delinquents, selected at random, showed but 1.2 per cent of nomadism. Hereditary nomadism is probably the chief contributing cause of at least 50 per cent of cases in which truancy is the principal offense. The family of S-3 (Fig. 37) is an illustration of the occurrence of habitual truancy in a family in which the nomadic ampulse is not normally inhibited. Our conclusions were in general agreement with the findings of Davenport (16) which are as follows:

> 1. The wandering instinct is a fundamental human instinct, which is, however, typically inhibited in intelligent adults of civilized peoples. 2. Nomadism is probably a sex-linked monohybrid trait. 3. Sons are nomadic only when the mother belongs to nomadic stock. 4. Daughters are nomadic only when the mother belongs to such stock and the father is actually nomadic. 5. When both parents are nomadic the expectation is that all the children will be. 6. The nomadic impulse frequently occurs in families showing various kinds of periodic behavior, such as depression, migraine, epilepsy, and hysteria. In such cases the nomadism is not caused by these states, but the tendency may be released by their presence.

CHAPTER X. HOME AND NEIGHBORHOOD CONDITIONS.

Delinquency and the home. Of all of the suggested causes of delinquency, "poor home conditions" is probably the most common. We are told by popular writers that delinquency and waywardness are almost invariably due to either the carelessness of parents or the extremely unfavorable environment into which the child happens to be born. A recent book[1] which may be taken as fairly representative of this attitude, reports that "a careful study of ten thousand children who have passed through the Juvenile Court of Philadelphia has shown that the presence of these children in the court was due in a large proportion of the cases to conditions of home life unfavorable to wholesome development." Again, "To make all parents understand that it is through their own inefficiency that the ranks of the criminals gain their largest number of recruits is the next step toward saving wayward children and preventing crime."

It is not difficult to understand why such factors in the production of delinquency often receive undue emphasis to the extent of being misleading. A brief and hasty survey at the time of bringing a child into the court often reveals conditions similar to those suggested, viz: the unfavorableness of home conditions and the "inefficiency" of the parents. If the child has come from a dirty, dingy home, it is taken as sufficient reason for his stealing, burglarly, arson, incorrigibility, or other offense. If the parents are cruel, it seems only a logical consequence that the boy should take to stealing automobiles! Of course, in many cases it is difficult to place the blame directly on the parents, or upon the neighborhood in which they live. But when opportunity affords, it is convenient to fix the responsibility on certain definite accompanying facts.

Those of us who wish to base our conclusions upon facts believe that there is a real need for careful, accurate, unbiased investigation of home and parental conditions. Although "poor homes" and "inefficient parents" are topics of wide discussion, we have had no way of agreeing upon the exact meaning of those terms. We have been equally at a loss to discuss intelligently "good homes" and "efficient parents". We are not told in the reference to the "careful study of ten thousand children" (ibid) what is considered a satisfactory home, or under what conditions children are known definitely to be beyond all danger of becoming wayward. The looseness with which these terms are used (and discussed) is, in the opinion of the present writer, a serious handicap to the efforts to discover the real causes of juvenile delinquency.

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[1] Schoff: The Wayward Child. Bobbs-Merrill Co., Indianapolis, 1915. p. 34.

The study of home and parental conditions is but supplementary to the present inquiry concerning the intelligence of the delinquent boy. It is not proposed to discuss here the causes of delinquency apart from the relation of different causes to the factor of intelligence. There is, however, a direct relation between the general level of intelligence of individuals and the environment in which they are likely to be found. Our results show that the persons of low intelligence have usually settled in unsatisfactory neighborhoods, and have for the most part poorly kept and ill-furnished homes. A feeble-minded mother is not likely to keep her home in a neat, sanitary condition unless she is supervised by a more intelligent husband or other relatives. She is neither greatly concerned with the conduct of her children, nor capable of being so. Such a case would provide a relatively common example of "parental inefficiency"; and many social workers would explain the conduct of a delinquent boy wholly upon the ground that the "home conditions were unfavorable". This statement, as regards the quality of the home conditions, may be true. But the real cause of the delinquency lies farther back. It is in all probability a case of inherited feeble-mindedness. The home conditions and the delinquency are but different expressions of the same cause. Just so long as feeble-minded persons are allowed to produce children, we will have "poor home conditions" and other consequences of mental deficiency to explain.

Our figures have shown that approximately one-third of the population from which our delinquents have come are definitely feeble-minded. Since this is so large a proportion in comparison with that for the general population it is only to be expected that a larger proportion of poor homes should be found in the localities where those delinquent-producing persons live.

But we have also found that not all delinquent boys come from "poor homes" in the usual meaning of that term. We have many cases of boys coming from very good homes where apparently the best of opportunities have been offered, and where the parents have used every possible means at their disposal to direct their children toward useful citizenship. These prompt us to inquire again: what are the home standards which assure us of well-behaved children? Moreover, not all children in our "poor homes" become delinquent. In the great majority of cases but one or two children in a family ever become delinquent, excepting among the definitely feeble-minded. How are we to explain delinquency by a "poor home" which does not affect all the children alike?

The "poor home" theory of delinquency is weak and insufficient because (a) we have had no standards of comparison by which the terms "good homes" and "poor homes" could be commonly understood; (b) it does not take into consideration the probable causes of the "poor homes"; and (c) it does not assure us that if the home conditions had been otherwise, the child in question would not have been delinquent.

The inquiry into the conditions under which these delinquent boys have received their early training discloses the following groups:

I.	Parents' home	80 per cent
II.	Homes of other relatives	9 per cent
III.	Homes of persons not relatives	6 per cent
IV.	Institutions	5 per cent

The first group consists of those who have spent their pre-delinquent years in the family home, i. e. where one or both parents are living. The second and third groups include those who have been adopted into other homes. Usually the homes so provided are better than any the real parents could have maintained. The fourth group includes those who have spent the greater part of this period in institutions (usually orphanages). All groups include some illegitimate children, but the greatest proportion is found in the "institution" group. Likewise all groups include some children whose parents are living. Those of groups I, II and III have lived in the homes of private families; it is these homes, including 95 per cent of our cases, which will be discussed here.

Method of grading homes. The task of analyzing home conditions with reference to all the factors which influence the conduct of children requires far more reliable and extensive data than are available at the present time. Perhaps it will never be possible to measure home influences as accurately as we can measure intelligence. Variable social factors do not lend themselves readily to objective measurement. So little has been done in that field that there is practically nothing which may serve as a tentative norm for comparison. During the progress of this study, however, the writer undertook to classify the homes of these delinquent boys by means of a tentative scale. On this scale the reports of the field-workers were graded and a "home index" secured for each home so classified. The items used for the classification are as follows:

(I) **Necessities**: representing the status of the home with reference to the ordinary needs of life; income, food, clothing, shelter, etc.

(II) **Neatness**: the order and taste in which the home is arranged; also its condition from the standpoint of sanitation and health.

(III) **Size**: relative, of course, to the number of persons living in the home.

(IV) **Parental conditions**: the important facts concerning the parents, the extent to which they are living together, and the degree of harmony which usually prevails.

(V) **Parental supervision**: the extent to which the parents (or guardians) exercise their jurisdiction over the physical, mental and moral welfare of their children; the quality and fairness of this control.

Each item, after being recorded, is given a grade on a scale of 5 points. For purposes of uniformity in grading, a standard score sheet has been prepared. This includes 121 condensed sample items from homes which have been uniformly reported upon by trained field-workers. Samples are given for each item, and for each point, grading from 1 to 5 inclusive. The method of grading is exactly the same as grading handwriting by the Thorndike or Ayres scales, grading compositions by the Hillegas scale, etc., being a comparison of the quality of new data with that of a graded series. One needs but to find the point at which the new data are most nearly in qualitative accord with the standard data, and to assign the corresponding number of points. The home index is found by adding the five item-scores. A second report on the scale (reference 66) includes a more detailed description of the items, and a copy of the standard score sheet.

TABLE XVI. HOME INDEX DISTRIBUTION FOR 162 DELINQUENT BOYS.

Index	Cases	Index	Cases
25	1	14 (Median)	12
24	1	13	11
23	4	12	12
22	1	11	8
21	5	10	10
20	7	9	8
19	9	8	6
18	13	7	5
17	11	6	7
16	6	5	6
15	19	Total	162

Reliability of the method. It is difficult to determine how reliably this method gives us the true status of the homes, for, so far as the writer is aware, there is no other available method for comparison. For our purpose, however, it was found so superior to the absence of any method that it has been continued to good advantage. So far as the scale concerns the accuracy of judgment, the set of standard samples has been of decided value. The judgments of two persons (65,p.275) agreed closely, even with the tentative standard score card as a basis. The use of the revised standard score sheet gives still better results. However incomplete the scale is in its present form, it embodies at least six of the fundamental principles upon which the accurate measurement of social qualities should be based: (a) the method is uniform; (b) it provides objective standards for comparison; (c) the gradings of different individuals agree far more closely with than without the scale; (d) its use requires an accurate knowledge of the home based on personal visits; (e) it includes the economic, sanitary, and personal elements; (f) it is better than any other method yet proposed.

The homes of delinquent boys. At the time of this writing the homes of 162 of our cases have been visited, recorded and graded by trained field-workers. The index distribution for these is given in Table XVI. The range is from Index 5, which represents very unfavorable conditions, to Index 25, which represents conditions more favorable than may be found in most American homes. This wide range prevents us from accepting the usual assumption that the homes of delinquent boys are consistently inferior to the homes of non-delinquent boys[2]. The study of our cases has shown that delinquency may occur in homes of all grades, as judged by this scale. The median index is 14.

The following are condensed summaries of the home condition of some representative cases:

CASE STUDIES OF HOME CONDITIONS.

(A) INDEX 5 (1, 1, 1, 1, 1)

Necessities. (Grade 1): Contains only bare necessities. Furnishings old dilapidated, cheap. Tables and chairs broken, hardly fit to use. No comfort or modern improvements. No pictures or decorations. Income, father's day labor wages, average about $1.00 a day.

Neatness. (Grade 1): Everything dirty. Nothing arranged neatly o systematically, no respectable care given to what equipment there is.

Size. (Grade 1): Basement of a three-story tenement house. Famil (of 5 persons) has but one room; in this they eat, cook, sleep and "live".

Parental conditions. (Grade 1): Father and mother living together, tr to be harmonious. Father tubercular, cannot work much. Mother an epilept cripple, has been in an asylum for insane.

Parental supervision. (Grade 1): No supervision provided for any the three children. Father is away all day. Mother being physically inc pacitated cannot supervise properly.

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[2] In approximately 13 per cent of our cases, the boy is the only livin child in the family. In the remaining 87 per cent, there are from 2 to other children in the family who have not become delinquent. Thus, in o sense, these homes of delinquents are also homes of non-delinquents.

(B) INDEX 6 (2, 0, 1, 2, 1)

Necessities. (Grade 2): Poorly furnished with old wooden chairs, cheap table, wood stove. Beds have old dirty blankets. Carpet worn to shreds. Curtains of cheesecloth, once white, now almost black with dirt and age. Only income is that of father, a common laborer, wages about $1.25 a day.

Neatness. (Grade 0): Everything not only neglected, but positively filthy.

Size. (Grade 1): A mere "shack" of a house, 4 rooms with 8 persons in the family.

Parental conditions. (Grade 2): Parents separated when boy was about 2 years of age. Mother remarried to a foreigner. Mother formerly an inmate of an industrial school, and has not improved much since leaving.

Parental supervision. (Grade 1): Mother neglects children, does not attempt to help them. Allows them to run streets, etc., without supervision. Step-father inclined to make light of boy's depredations, and to uphold him when in trouble.

(C) INDEX 9 (3, 3, 2, 1, 0)

Necessities. (Grade 3): Mother works out by the day and does laundry. Earns $8.00 to $10.00 per week. Has received aid from county. Food fair, but poorly prepared. Meals irregular. Furnishings scant. A few cheap pictures. Family does not suffer from lack of necessities.

Neatness. (Grade 3): Home fairly clean, reasonably well-arranged. Mother uses entire house for drying laundry. Yard poorly kept. Carelessness as to weeds, fences, etc. evident. In absence of mother the responsibility for housework rests upon 13-year-old-daughter.

Size. (Grade 2): Two rooms with front and back porch. Four persons living at home. Rather crowded when all home. Has both front and back yards, but small.

Parental conditions. (Grade 1): Both parents of low intelligence. Have been separated for 12 years (propositus is 15). Before this they often quarreled. Father an habitual drunkard, often in police courts. Once sent to hospital for insane. Wife refused to live with him.

Parental supervision. (Grade 0): Parents not effectively interested in the boy. Their only desire is that he shall help support them. No home supervision or training of value. Children allowed to do as they like. Father when intoxicated, abused boy, who subsequently spent much time in undesirable places.

(D) INDEX 13 (3, 3, 3, 2, 2)

Necessities. (Grade 3): Furnishings sufficient in quantity, serviceable but cheap. Inexpensive pictures, calendars, etc. No table-cloth. No carpets or rugs. Oil stove for heating. Father unskilled laborer, income about $3.00 per day.

Neatness. (Grade 3): Rooms clean, but not well arranged. Furniture scattered promiscuously about, no special regard for order. Pictures, books, etc. thrown together in a trunk in corner of living room. House gives appearance of having just been moved into, although family has lived there several years.

Size. (Grade 3): Small house, 3 rooms, two persons. Front room serves as dining-room and for living room purposes. No modern improvements evident.

Parental conditions. (Grade 2): Parents separated Mother remarried. Father alcoholic, now dead. Mother nervous and easily irritated. Step-father sober and industrious.

Parental supervision. (Grade 2): Father abused boy and his mother. Was a sex pervert. Mother not a strong character and could not control boy when his wayward tendencies developed. Step-father has been good to the boy.

(E) INDEX 22 (4. 4. 5. 5. 4)

Necessities. (Grade 4): Father earns about $15.00 per week as laborer. Food and clothing adequate. Well furnished, with modern improvements. Gas, electricity, city water, etc.

Neatness. (Grade 4): Interior clean and well cared for. Well arranged. Home just new and painted. Yard not well kept at present, but there are indications that the new home will be kept in good order.

Size. (Grade. 5): Large two-story frame building. Some boarders taken. Plenty of room for all. Rooms, 7 or 8; persons 4.

Parental conditions. (Grade 5): Foster parents have had boy since early infancy. Intelligent people. Mother has traveled extensively, now a church solicitor. Parents living in harmony. Father away, but mother at home most of the time.

Parental supervision. (Grade 4): Deeply interested in the boy. Mother is the chief supervisor. Boy is only child. Father a steady, hard-working man, sets industrious example. Boy nevertheless runs with low-grade companions.

(F) INDEX 24 (4, 5, 5, 5, 5)

Necessities. (Grade 4): Furnishings good, well selected and substantial. Plenty of it for the family, but no excess. Father a skilled tradesman, earns about $75.00 a month.

Neatness. (Grade 5): Everything clean and as well kept as can be found in any home.

Size. (Grade 5): Large 5 room house, four persons, plenty of room for all. Propositus and brother had a room of their own.

Parental conditions. (Grade 5): Parents living together in perfect harmony. Both intelligent, kind, sensible people, of good habits.

Parental supervision. (Grade 5): Father at home evenings. Boys kept at home, every possible effort being made toward their welfare and advancement. Not permitted to run the streets. Propositus played truant from school, however. (Principal offense in this case was forgery. Father required boy to make up the deficiency when bad checks were turned in.)

(G) INDEX 25 (5, 5, 5, 5, 5)

Necessities. (Grade 5): Furnishings plentiful, heavy oak chairs, tables, etc. Piano, good quality fixtures, good rugs, everything else in accord. Pictures well selected. Modern improvements. Father railroad conductor, income about $150.00 a month.

Neatness. (Grade 5): Furniture well arranged, everything clean and in good order. Fine white clean curtains. Abundant evidence of good taste.

Size. (Grade 5): Two-story house, 7 large rooms. Four persons living at home. Boy has a room of his own.

Parental conditions. (Grade 5): Parents living together apparently in perfect harmony.

Parental supervision. (Grade 5): Both parents intelligent. Father away often, because of railroad duties, but his absence does not interfere with the supervision of the home. Both parents take an intelligent and kindly interest in the children, especially in their character and education.

The cases which the foregoing represent probably furnish a more reliable basis for speculation as to the probable effect of home conditions in delinquency than is generally offered. We find that the range of quality is so great that there is little justification for giving "home conditions" as a consistent predominating factor in the production of delinquency. It is true that the median home index of delinquents is probably a few points lower than the median index of homes in which none of the children have ever become delinquent. This, in itself however, is not sufficient evidence for the conclusion which is commonly made. The evidence thus far indicates that the fundamental causes of delinquency are farther back than the facts which are usually collected under the title of "home conditions".

The same is true in probably a greater degree with reference to the effect of home conditions upon intellectual retardation. We have I.Q's of .90-1.10 with home indices of 5-10, and I.Q's. of 50-75 with home indices of 15-25. There is, however, a positive correlation between home index and I.Q. This does not substantiate the claim that the home is a dominating factor in mental development, but it is more likely that the general grade of intelligence common to the family is an important factor in the social quality which the home attains[3]. As the study of delinquency becomes more scientific, it will probably be found that the inherent individual traits of a child have more influence in the quality of his social adjustments than do the conditions under which he happens to be living at the time his irregularities are reported.

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[3] c. f. Chapter IV.

Homes of non-delinquent children. For purposes of comparison, we secured gradings of fifty homes which contain children, but in which no child has ever been delinquent. These are not entirely unselected homes and do not represent the general population. The gradings do serve, however, in a general way for comparative purposes in the absence of specific norms. The index distribution of these non-delinquent homes ranges from 4 to 26 against 5 to 25 for the homes of delinquents. The median index for the non-delinquent group is 22 as against 15 for the delinquent group[4]. A brief survey of these homes makes clear the fallacy of drawing too sweeping conclusions as to the factors in homes which cause the children to become delinquent. In at least one-half of the homes of the non-delinquent group we find conditions which, were some of the children delinquent, would be given by some social workers as obvious causes. Some of these cases are as follows:

Index 4. Extremely poor. Father dead. Mother does washing. Seven children in family. Crowded conditions. Children associate with bad companions.

Index 10. Parents extremely poor. Father a laborer. Home not clean.

Index 10. Very poor. Dirty home. Many children. Boys allowed to run streets. Father away most of time. Does not have steady employment.

Index 11. Parents poor. Father a teamster. Very small house. Sickness in family.

Index 12. Parents divorced. Children live with mother who is very poor. Large family. Home not attractive.

Index 14. Father away most of the time. Children not well looked after.

Index 15. Father dead. Boy has to shift for himself.

Index 19. Boy allowed to run streets. Associates with very bad companions.

Index 20. Mother has violent temper. Does not know how to raise children.

Index 21. Many children. Father a laborer, small income. Children allowed to choose companions.

Index 22. Mother dead. Father remarried. Stepmother not congenial. Boy allowed to run streets.

Index 24. Mother dead. Father good, but busy. Children take care of home.

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[4] Reference (65) page 285. It should be emphasized that this comparison is not of the homes of delinquents with homes in general, but with a selected group of non-delinquent homes.

Many other examples could be given if space permitted. Were we to cite data from entirely non-selected homes, the similiarity of conditions in the homes of delinquents and non-delinquents would be still more striking.

TABLE XVII. NEIGHBORHOOD INDEX DISTRIBUTION FOR 162 DELINQUENT BOYS.

Index	Cases	Index	Cases
24	1	14	19
23	4	13	15
22	7	12	0
21	7	11	4
20	12	10	4
19	18	9	6
18	10	8	3
17	11	7	1
16 (Median)	20	6	1
15	19	Total	162

Neighborhood conditions. A similar scale for grading the quality of neighborhoods[5] shows an equally wide range of distribution for the social conditions in the immediate vicinity of the homes. The distribution of 162 cases is shown in Table XVII. The range is 6-24, median 16. As in the case of home conditions we find no "type" or quality peculiar to or even representative of the environmental conditions which are associated with delinquency in boys. Moreover, every neighborhood graded contains many children who have shown no indications of delinquency or waywardness.

As a rule the quality of the home and the quality of the neighborhood in which it is located are in fairly close agreement. Good homes are usually found in good neighborhoods, and unfavorable homes in poor neighborhoods[6]. This probably holds true for the homes and neighborhoods of any community.

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[5] A Scale for Grading Neighborhood Conditions. Whittier State School, Research Bulletin No. 5, May 1917. pp. 17. The items upon which neighborhoods are graded are (I) neatness, sanitation, and improvements; (II) playground facilities; (III) institutions and establishments; (IV) social status of residents; (V) average grade of homes. Each item is graded on a scale of 5 points, the sum of the grades of the five items constituting the Neighborhood Index.

Influence of population density. Another factor which has been commonly given as an important cause of delinquency is the density of population. It is generally believed that crime and delinquency are relatively more prevalent in the large cities than in the towns and rural communities. A recent study (67) has shown this belief to be at variance with the facts, at least as concerns delinquent boys in California. The analysis of 150 cases of Whittier State School boys with reference to the factor of density of population in their home communities leads to the following conclusions: (I) ''That delinquency (among these boys) is more prevalent in small towns and least prevalent in the open rural country. . . . . There is an inverse ratio between the population of incorporated places and the proportion of delinquent boys committed from them''. (II) ''That no particular offense or group of offenses committed by delinquent boys are especially associated with city, town or rural population''. (III) ''That the average level of intelligence is higher in delinquent boys from the cities than in those from the towns and rural districts. The proportion of feeble-mindedness is greatest in those from the rural districts''. Thus, it does not appear that (in California) the large cities are ''hotbeds of vice'' in comparison with the smaller towns, at least if the relative number of commitments for delinquency is a reasonable measure of the prevalence of such conditions.

The importance of good surroundings. The foregoing brief summaries are not intended to furnish any general conclusive proof with reference to the effect of environmental conditions upon delinquency. The writer will miss his aim entirely if these data are taken to indicate that in our cases the home conditions have been of no consequence. It has been the purpose of this chapter (a) to give as accurate an idea as possible of the home conditions of some of our cases; and (b) to illustrate the value of measuring social factors by some uniform method, just as we find it desirable to measure intelligence by means of a standardized scale of tests. As the value of intelligence gradings depends upon the reliability of the measuring instrument, so the value of any statement concerning the causes of delinquency depends upon the extent to which the suspected factors have been impartially observed and systematically recorded and compared.

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[6] By the Pearson rank-difference method, the correlation between the Home Index and Neighborhood Index of the 162 cases distributed in Tables XVI and XVII was found to be .71.

The results of grading homes and neighborhoods emphasize the importance of economic and social factors in child welfare. We cannot believe that many homes or neighborhoods having an index of less than 10 can be desirable places for the rearing of children, whether or not delinquency is one of the consequences. Such homes and neighborhoods abound in dirt, disease, and bad example, which may have marked influence upon the lives of some of the children. The extent of the influence, we may logically believe, depends in a large measure upon the physical and mental endowment of the children in question. Children of inherent weakness of intelligence or inhibiting capacity are more likely than not to express these weaknesses in any ordinary environment. If, as in the case of many exceptional children, the environmental conditions are also unfavorable, the probability of irregular conduct is increased. On the other hand, children whose mental and physical endowment is normal may overcome the pressure of unfavorable surroundings and the force of bad example, and become socially normal despite these conditions. At least there have been numerous instances of the kind. Unfortunately, poor endowment and poor surroundings too often occur together. For this reason it seems imperative that children who show unsocial tendencies at an early age be removed from unfavorable homes and placed under intelligent supervision. Even this in some cases may not entirely prevent delinquency, but it is reasonable to believe that a properly equipped custodial parental school may correct the disadvantages of poor home and neighborhood conditions, and provide training based to some extent upon the native equipment of the charges.

CHAPTER XI. SUMMARY AND CONCLUSIONS.

1. This study is a discussion of the results of intelligence tests of 470 boys and young men, all of whom have come to the attention of the juvenile court and most of whom were in institutions at the time of the examination. The work was carried on chiefly at Whittier State School, California. The intelligence levels were obtained by the application of the Stanford Revision of the Binet-Simon Intelligence Scale, each test being expressed in terms of mental age and intelligence quotient (I. Q.). The procedure with reference to giving and interpreting the tests, the use of the I. Q., and the general classification of cases is based upon the findings of Dr. Lewis M. Terman, as reported in his ''Measurement of Intelligence.'' The tests were supplemented by data on personal and family history, medical data, investigations of homes, and analysis of conduct records. The data indicated wide variability of intelligence in the group studied, and the presence of five roughly definable social-intelligence groups, namely, (a) feeble-minded, (b) borderline, (c) dull-normal, (d) average-normal, (e) superior.

2. The feeble-minded group contains 141 cases, or 30 per cent of the total 470. It includes cases who show indications either by reason of low I. Q. (usually below .75) or by social data, or by both, of being unlikely to develop sufficient intelligence at maturity to ''manage themselves and their affairs with ordinary prudence, or compete on equal terms with their fellows.'' There is evidence in support of Goddard's findings relative to heredity as a causal factor. Probably 75 per cent of the boys in this group have inherited their defect. There are some cases of potential feeble-mindedness, coming within the scope of that term as used by E. A. Doll. We have found no cases of ''moral imbecility'' in the sense of specific retardation of moral functions, our data agreeing with the findings of Healy in this respect. Ten illustrative cases of feeble-minded delinquents are given, discussed under the following headings: (a) test results; (b) observations; (c) delinquency; (d) personal history; (e) family history; (f) conclusions.

3. The borderline group includes 128 cases, or 27.2 per cent of the total 470. The I. Q.'s of the group range from .70 to .86, median .78. By "borderline intelligence" is meant the degree of mental development which is just above the degree which we have already designated as feeble-mindedness. The decision as to the classification of borderline subjects is based upon both psychological and social data. Ordinarily persons testing in the vicinity of I. Q. .75 have been considered borderline cases. The validity of the borderline classification is acknowledged by most investigators, and the use of the designation is consistent with findings as to the continuity of intelligence. Socially and industrially we have found borderline intelligence associated with semi-responsibility, or a degree of success dangerously near failure. The indications are that most of our borderline cases will reach a level of intelligence at maturity corresponding to that of normal children twelve to thirteen years of age. Biologically, borderline intelligence probably represents a variation. It is found in stock containing both normal and feeble-minded persons. It is important eugenically to control the matings of borderline individuals. Ten illustrative cases are given, the data being classified in the same manner as for the preceding group.

4. The dull-normal group includes 97 cases, or 20.6 per cent of the total 470. The I. Q.'s range from .80 to .93, overlapping the borderline group below and the average normal group above. The designation is used in cases who are clearly not deficient, to a marked degree, but who are nevertheless incapable of exercising the intelligence which is common to the great mass of the population of the same age. In terms of ordinary usage, they correspond to the "backward" child in school. Although often believed to be the result of extrinsic conditions, the weight of the evidence suggests that slightly inferior mental development is probably the predominant cause of the low test results obtained in this group. Most dull-normals are backward in school, dull in their reaction to social, industrial, and moral situations, but are not incapable of successful competition in industrial fields. Many paroled and dischaged delinquents of this group have become self-supporting tailors, carpenters, printers, etc., although the degree of success obtained has been dependent upon varying factors related to intelligence and circumstance. The families of our dull-normals contain individuals of all intelligence groups, most of them

however, being of practically normal intelligence. Ten illustrative case studies are given.

5. The average-normal group includes 90 cases, or 19.2 per cent of the total 470. The term "average-normal" is intended to represent the grade of intelligence which is common to approximately 75 per cent of the general population, as determined by the distribution of the intelligence quotients of unselected school children. The degree of normality is expressed by the proximity to the median I. Q. of 1.00. Delinquent boys of this group more nearly resemble non-delinquents of the same age in their moral, social and industrial relations than do the delinquents of our other groups. Normality of intelligence predominates in the families of the average-normal group, mental deficiency seldom occuring. Five case studies are given for this group.

6. The superior group is represented by 14 cases, or 4 per cent of the total 470. Their I. Q.'s range from 1.06 to 1.35. Superiority, for purposes of definition here, implies a degree of intelligence definitely above the average obtained in unselected groups, and is limited to cases in which both the tests and supplementary data furnish evidence of such deviation. Relatively little has been said in other investigations with reference to the extent of superior intelligence among delinquents, although several studies indicate the presence of a few scattered cases. Predictions have been made for our superior cases based on the I. Q. This section is illustrated with five individual cases.

7. A delinquent (in California) is a minor who commits an act in violation of a law. Wards of the juvenile court are either delinquent or dependent, although the distinction is not always made as a matter of legal procedure. Most institution cases have committed more than one offense, the number ranging from one to six. The principal reasons for commitment of this group in order of frequency are stealing, burglary, larceny, immorality, incorrigibility, dependency, vagrancy, truancy, forgery, assault, highway robbery, drunkenness, arson and murder. We find no grade of intelligence to be characteristic of any particular offense, although the group of offenses involving personal injury is represented by a lower median intelligence quotient than are offenses against property or against peace

and order. Our findings in this respect are in accord with those of Rossy and Bowers. It is not likely that the intelligence of delinquent boys bears any marked relation to the probability of apprehension. The median age of commitment for our cases is essentially the same in all offense groups.

8. The delinquent and dependent boys under discussion here include individuals of three racial groups, in the following proportions: White, 72.6 per cent; Mexican-Indian, 15.1 per cent; Colored, 12.3 per cent. In the general level of intelligence expressed either in terms of mental age or intelligence quotients, the Colored group is superior to the Mexican-Indian group, and the White group is superior to the Colored group. Of the two non-White groups, the Mexican-Indians are the more variable in the general level of intelligence. The proportions of feeble-minded are as follows: White, 23.4 per cent; Mexican-Indian, 55 per cent; Colored, 38 per cent. Analysis of the tests indicates that neither of the non-White groups of a given mental age has been at disadvantage in any particular tests, such as for example, those which might be thought to depend mainly upon language mastery. The Mexican-Indians, on the whole, perform such tests as well as those which involve manipulation. Among the reasons for commitment there are no striking racial differences. Offenses against property predominate for all three racial groups. The data on school training show that the Mexican-Indian group has reached a median grade which is two grades lower than that for the White and Colored groups. The racial groups are similar as regards the distribution of the chronological ages of individuals classified as feeble-minded. Racial differences are discussed here, and the data presented so that our findings may be compared with those of other studies which include one race only.

9. The available evidence indicates that criminality (or delinquency) is not in itself an inherited unit trait. It is possible that it may result from the combination of certain inherited factors. Heredity is an important factor in delinquency and criminality in that certain traits which are known to be hereditary are closely related to social misconduct. The most common of these are feeble-mindedness, insanity, and nervous disorder. These traits are probably more common among the relatives of delinquent boys than in the general population. Of 470 cases of delinquents only four have been adjudged

insane. There are a number of cases which border on insanity. These are of all levels of intelligence, but occur for the most part in families where neuropathic conditions prevail. There is but one case of marked epilepsy, and this is a colored boy whose father was an Indian. There are a number of cases, of extreme nervousness or "excitability." The significant symptoms of extreme nervousness are irritability, peevishness, craving for excitement and the development of various idiosyncrasies. Many delinquent acts may be traced to nervous condition. Extreme nervousness occurs in 42 per cent of our cases. This is probably four times as common as is the case among ordinary school children. Approximately 37 per cent of the families of delinquent boys contain one or more alcoholic persons. In 41 per cent of these alcoholic families, the boy himself is alcoholic About 9 per cent of the total male population in these families are alcoholic. There is no marked correlation between intelligence level and alcoholism. Hereditary nomadism is also an important factor in delinquency and accounts for much habitual truancy.

10. "Poor home conditions," often given as a dominant factor in the production of delinquency, is probably over-emphasized. This is apparently due to (a) the confusion of associating consequences with causes; (b) the failure to apply uniform standards of measurements to the home in question; and (c) the lack of comparative data on homes in which delinquency has not occurred. The writer has devised a scale by means of which both home and neighborhood conditions may be classified and roughly graded. The scales are based on a series of five items, each of which may be graded on a scale of five points. The resulting sums are known as the "home index" and "neighborhood index" respectively. The indices usually range from 5 to 25 points. The median home index of 162 of our cases was found to be 14 points. The median neighborhood index for the same cases is 16 points. The median home and neighborhood indices for a miscellaneous group of 50 non-delinquent (but not entirely non selected) cases were found to be 20 and 19 points respectively. The correlation between home and neighborhood index for our 162 cases is .71 (Pearson). Condensed summaries or representative cases indicated the wide range which exists in the home conditions of both delinquent and non-delinquent children. There is no "type" or grade of home or neighborhood which is peculiar to either delinquency or non-delinquency. Density of population apparently has little effect upon delinquency in California. If any kind of a community is more of a factor than any

other, it is the small town. The usual belief that cities are "hotbeds of vice" is not substantiated by commitments to Whittier State School. Good surroundings, whether or not a direct or important cause of delinquency, are to be greatly encouraged for the sake of growing children. Where endowment and environment are both unfavorable, the custodial parental school seems the logical need.

The writer's conclusions have usually been expressed in connection with the discussion of the data upon which they are based. Some of the more important suggestions may be summarized as follows:

1. That the Binet-Simon Scale in its present revised form is sufficiently accurate for determining the general level of intelligence among delinquent boys between the ages of 6 and 22 years.
2. That the general level of intelligence among delinquent, dependent, and potentially delinquent boys is decidedly lower than that of ordinary children and adults of the same ages.
3. That feeble-mindedness is much more common among delinquent, dependent, and potentially delinquent boys than in the population as a whole; and that approximately 30 per cent of the delinquent and dependent boys included in this investigation are definitely feeble-minded.
4. That the low intelligence among delinquent boys is the chief contributing factor in their delinquent conduct.
5. That any level of intelligence lower than that of the average-normal accounts in part for delinquency, the extent to which it is responsible depending upon the degree of intelligence, which may be best expressed by the intelligence quotient.
6. That delinquency (or criminality) is probably not an inherited trait, considered apart from other traits which are heritable.
7. That heredity bears an important relation to delinquency through the nature of feeble-mindedness and other heritable traits.
8. That feeble-mindedness occurs in approximately the same proportions among the families of delinquent boys as among the delinquent boys themselves.
9. That the application of eugenic principles in preventing the production of persons of very low intelligence will aid materially in reducing the extent of delinquency.

10. That delinquent conduct in persons of average or nearly average-normal intelligence may in some cases be explained by the inability of persons, through inherent weakness, to inhibit certain natural tendencies.

11. That delinquent Whites, on the whole, are superior in intelligence to delinquent Colored boys; and delinquent Colored boys to delinquent boys of Mexican-Indian descent; but that there is no general level which is characteristic of any racial group; that individual differences in any racial group or combination of racial groups are greater than the differences between the racial groups each considered as a whole; and that the Binet-Simon Scale is a satisfactory instrument for determining the intelligence levels of individuals of these three racial groups.

12. That home conditions do not in themselves explain juvenile delinquency to the extent to which it is commonly supposed; but intensive study of home conditions in the manner suggested in this study will probably reveal the true status of environmental factors in relation to social conduct.

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APPENDIX TABLE I. SUMMARY OF PRINCIPAL DATA, CASES ARRANGED IN ORDER OF INTELLIGENCE QUOTIENT.

(Note: Case numbers given according to social-intelligence grouping. Ages and mental ages given in years and months. "Comm." means age at time of commitment. "Grade" refers to school achievement. "Inst." refers to institution in which subject was examined, including the following: W, Whittier State School; Q, San Quentin prison; S, San Diego juvenile detention home; L, Los Angeles Juvenile Hall; G, George Junior Republic of California.)

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
1	F-1	18-7	7-6	.47	M	B, V	16	IV		W
2	F-2	13-10	6-8	.48	M	Sx, I, V	13	Ung.		W
3	F-3	16-0	8-1	.51	W	B	9	I	Brother of F-10	W
4	F-4	14-11	7-11	.53	W	V, Sx, I, S	14	Ung.		W
5	F-5	16-2	8-5	.53	W	D	15	III		W
6	F-6	18-1	8-5	.53	M	Sx, S, K	12	I		W
7	F-7	12-0	6-6	.54	W	S, D	12	II		S
8	F-8	20-10	8-8	.54	W	I, T, D	18	II		W
9	F-9	15-0	8-4	.55	M	Sx, D, I, S	14	III		W
10	F-10	19-3	8-10	.55	W	B	13	I	Brother of F-3	W
11	F-11	13-4	7-6	.56	M	S, B	13	II		W
12	F-12	22 +	9-0	.56	W	M	22+	IV		Q
13	F-13	14-9	8-6	.57	M	B, T, S	13	I		W
14	F-14	16-2	9-2	.58	C	Sx, D	14	IV		W
15	F-15	19-8	9-4	.58	M	T, D, I, L, Dr	15	III		W
16	F-16	20-1	9-5	.58	W	H, V, T	17	III		W
17	F-17	15-6	9-1	.59	C	B, I	15	VI		W
18	F-18	16-0	9-5	.59	W	Sx, S, T	15	II		W
19	F-19	16-4	9-5	.59	W	V, I, T, Dr	15	VI		W
20	F-20	17-10	9-5	.59	M	L, D, T	15	III		W
21	F-21	12-0	7-2	.60	W	S, D	13	I		W
22	F-22	16-0	9-7	.60	M	B, F, D	16	O		W
23	F-23	18-0	9-7	.60	W	B, T	14	II		W
24	F-24	19-11	9-7	.60	W	Sx, B	17	VII		W
25	F-25	21-8	9-7	.60	C	V, I, T	14	III		W
26	F-26	14-2	8-7	.61	M	B, T, S	12	IV		W
27	F-27	14-9	9-0	.61	W	L, B, T	14	VI	Brother of F-83	W
28	F-28	15-3	9-3	.61	M	D	15	IV		W
29	F-29	16-5	9-10	.61	W	B, Sx, I, L, T	15	VII		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
30	F-30	16-8	9-10	.61	W	L, T	16	VI		W
31	F-31	18-5	9-10	.61	M	S, T	13	V	Brother of F-40	W
32	F-32	14-4	8-10	.62	W	Ar, I, L, T, S	14	IV		W
33	F-33	14-8	9-1	.62	M	B, I, S	14	IV		W
34	F-34	14-9	9-2	.62	C	L, B, D, T, S	15	IV		W
35	F-35	15-2	9-6	.62	C	S	15	VI		L
36	F-36	15-9	9-10	.62	M	D	15	III		L
37	F-37	16-2	9-10	.62	W	B, I, L	16	VI		W
38	F-38	13-3	8-5	.63	W	S, T, D	13	IV		W
39	F-39	13-5	8-6	.63	M	S	13	III		W
40	F-40	13-9	8-8	.63	M	L, T, S	13	IV	Brother of F-31	W
41	F-41	15-1	9-6	.63	W	Sx, D	15	Ung.		W
42	F-42	19-6	10-0	.63	C	Sx, T, S	10	II		W
43	F-43	20-4	10-0	.63	M	B, S	14	II		W
44	F-44	22-1	10-1	.63	M	B	16	II		W
45	F-45	14-4	9-2	.64	M	S, D, T	14	VIII		W
46	F-46	15-2	9-8	.64	W	I	15	VI		G
47	F-47	17-5	10-2	.64	W	T	14	IV		W
48	F-48	18-7	10-4	.64	W	D	18	VII		G
49	F-49	18-8	10-3	.64	M	Ar	17	IV		W
50	F-50	18-10	10-2	.64	C	B, L, T	12	IV		W
51	F-51	13-7	8-11	.65	M	D, T	13	III		W
52	F-52	14-3	9-3	.65	W	S, D	14	IV		W
53	F-53	14-8	9-7	.65	W	T, V, S, I	14	IV		W
54	F-54	15-8	10-3	.65	W	S, T	15	IV		W
55	F-55	15-9	10-2	.65	M	S, Sx	15	VIII		W
56	F-56	16-3	10-4	.65	M	S, L, B, T, I	15	VI	Brother of F-94	W
57	F-57	16-4	10-4	.65	W	V, Sx	12	IV		W
58	F-58	17-11	10-5	.65	C	S, I, H, B, L	17	VII	Brother of D-41	W
59	F-59	19-2	10-4	.65	C	B, D, S	16	V		W
60	F-60	20-7	10-5	.65	M	S, I	13	VI		W
61	F-61	12-6	8-4	.66	W	S, T, I	12	III		W
62	F-62	13-1	8-8	.66	M	T, D	11	II		W
63	F-63	15-9	10-5	.66	W	S, T	15	V		W
64	F-64	17-3	10-7	.66	W	S, V	16	V		W
65	F-65	18-8	10-7	.66	M	H, B	16	III		W
66	F-66	19-1	10-6	.66	M	B, S, D	15	III		W
67	F-67	19-9	10-7	.67	M	I, S, V	13	III		W
68	F-68	9-0	6-0	.67	W	D	9	II		W
69	F-69	13-5	9-0	.67	W	S, T	13	IV		W
70	F-70	14-0	9-4	.67	W	S	14	II		W
71	F-71	14-4	9-8	.67	W	D	14	IV		G

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
72	F-72	15-9	10-7	.67	W	B, I, S, L	18	IX		W
73	F-73	15-11	10-8	.67	C	I, S, Sx	15	VI		W
74	F-74	16-9	10-9	.67	M	D	13	VI		W
75	F-75	18-0	10-8	.67	M	B, S	15	VIII		W
76	F-76	18-7	10-8	.67	W	V, S, B, T	18	IV		W
77	F-77	20-5	10-9	.67	M	B, S, V	14	V		W
78	F-78	20-6	10-8	.67	W	B, S, L	17	VI		W
79	F-79	20-6	10-8	.67	W	Sx, A	14	III		W
80	F-80	20-11	10-8	.67	M	A	16	III		W
81	F-81	22-6	10-9	.67	W	Dr, B, F	16	IV		W
82	F-82	12-0	8-2	.68	M	Sx, D, S, T	12	I		W
83	F-83	13-9	9-4	.68	W	L, B, T	13	IV	Brother of F-27	W
84	F-84	15-3	10-5	.68	W	B, S	14	IV		W
85	F-85	15-10	10-9	.68	M	M	13	V		W
86	F-86	15-11	10-9	.68	W	B	15	IV		W
87	F-87	16-4	10-10	.68	W	B, I, L, T, S	15	III		W
88	F-88	18-4	10-10	.68	W	Sx, T, S	17	IV		W
89	F-89	18-10	10-10	.68	C	I	18	VII		W
90	F-90	20-4	10-10	.68	C	Sx, L, B	17	VII		W
91	F-91	21-0	10-10	.68	C	L, S, I	17	IV		W
92	F-92	10-4	7-2	.69	M	D, I	9	I		W
93	F-93	12-2	9-0	.69	W	Sx, D, S, I	11	I		W
94	F-94	12-7	8-8	.69	M	B, Sx	12	II	Brother of F-56	W
95	F-95	15-5	10-7	.69	W	B, T, S, Sx	11	III		W
96	F-96	16-0	11-0	.69	W	Sx, T	15	V		W
97	F-97	16-8	11-0	.69	W	A, T	15	IV		W
98	F-98	18-4	11-0	.69	W	S	18	VII		G
99	F-99	18-6	11-0	.69	C	T	11	IV		W
100	F-100	18-11	11-0	.69	W	L, D, T	15	VI		W
101	F-101	20-0	11-0	.69	W	A, T, L	17	V		W
102	F-102	20-8	11-0	.69	C	B, T, L	14	VII	Step-bro. B-92	W
103	F-103	12-8	8-10	.70	C	V, S, D, T	11	V		W
104	F-104	13-11	9-9	.70	M	I, T	15	VII		W
105	F-105	14-6	10-2	.70	W	A, B, S	14	V		W
106	F-106	16-0	11-2	.70	W	I, T, D, S	15	IX		W
107	F-107	16-1	11-2	.70	W	S	13	IV		W
108	B-1	17-2	11-1	.70	M	S, T, D	15	VI		W
109	F-108	11-0	7-10	.71	W	I, S, D, T	11	III		W
110	F-109	15-0	10-8	.71	C	B, S	16	V		W
111	F-110	16-2	11-3	.71	W	I, Sx, V, T	15	V		W
112	F-111	17-0	11-4	.71	W	S	17	VII		L
113	F-112	17-3	11-3	.71	M	B, T	14	IV		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
114	B-2	17-5	11-4	.71	W	L, T	14	VI		W
115	F-113	20-4	11-5	.71	W	S, D	16	III		W
116	B-3	20-6	11-3	.71	W	F, T	18	V		W
117	F-114	13-8	9-11	.72	C	B, S, D	13	IV		W
118	F-115	14-7	10-7	.72	W	L, S, T	15	IV		W
119	F-116	15-0	10-10	.72	M	B, L, V, T, S	14	VI		W
120	F-117	15-2	10-10	.72	W	S	15	VI		W
121	B-4	15-3	10-10	.72	W	F, S, B, L	15	VII		W
122	F-118	16-5	11-6	.72	W	V	16	VI		W
123	F-119	17-8	11-5	.72	W	S, T	15	VIII		W
124	F-120	18-7	11-5	.72	W	Sx, D, S	16	VII		W
125	F-121	18-9	11-6	.72	W	A, D, S, I	15	V	Cousin of N-10	W
126	F-122	19-2	11-7	.72	W	Sx, T, S	16	II		W
127	F-123	19-6	11-7	.72	W	B, L	14	II		W
128	F-124	13-9	10-0	.73	W	S, D	14	V		W
129	B-5	13-10	10-2	.73	W	S	13	IV		W
130	F-125	14-6	10-8	.73	W	L, I, T	14	VI		W
131	F-126	14-8	10-8	.73	W	S	14	VII		L
132	B-6	15-3	11-2	.73	W	S	15	VI		W
133	B-7	15-3	11-1	.73	C	Sx, T, V, I	15	VII		W
134	B-8	15-9	11-7	.73	M	F, S, B, T	15	VI		W
135	F-127	16-7	11-8	.73	C	F, S, T	16	Ung.		W
136	F-128	16-7	11-8	.73	C	B, L, T	14	VI		W
137	B-9	18-11	11-8	.73	C	H, S	15	VI		W
138	F-129	21-2	11-7	.73	W	Sx, D, H, S	14	V		W
139	B-10	10-4	7-8	.74	W	D	10	I	Brother of B-85	W
140	F-130	12-4	9-2	.74	W	B, T, S	12	III		W
141	B-11	13-3	9-10	.74	W	Sx, T, S	13	IV		W
142	B-12	13-9	10-2	.74	W	H, F, S	13	IV		W
143	F-131	14-4	10-7	.74	W	S, T	14	VI		W
144	F-132	14-6	10-9	.74	W	S, T, I	14	VIII		W
145	B-13	14-10	11-1	.74	W	L, T, I	14	VII		W
146	F-133	14-11	11-0	.74	W	B, T, S	14	V		W
147	B-14	16-3	11-9	.74	W	B, D, S, T	15	VIII		W
148	F-134	16-10	11-10	.74	C	B, S, T	15	VII		W
149	B-15	16-11	11-10	.74	W	Sx, T, S, I	15	VI		W
150	F-135	17-6	11-9	.74	W	B, L, D	12	VI		W
151	B-16	17-9	11-10	.74	W	F, S	15	VII		W
152	F-136	17-10	11-9	.74	W	Ar, D, I	10	III		W
153	B-17	19-6	11-9	.74	W	V, T	17	III		W
154	B-18	12-7	9-6	.75	W	V, T	12	V	Bro. B-87, D-8	W
155	B-19	12-11	9-8	.75	W	Sx, D	12	V		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
156	B-20	14-7	10-11	.75	W	V, L, T, Sx	14	V		W
157	B-21	15-10	12-0	.75	C	F, B, S	15	VIII		W
158	B-22	16-1	12-0	.75	M	S, T	15	VIII		W
159	B-23	16-2	12-0	.75	W	S, T, D	14	III		W
160	B-24	16-6	12-0	.75	W	S, T	14	VI		L
161	B-25	16-8	12-0	.75	C	S	12	VI		W
162	B-26	17-5	12-0	.75	W	S	17	VIII		G
163	B-27	17-11	11-11	.75	W	V, I	15	VI		W
164	B-28	18-0	12-0	.75	M	B, S, L, I	13	VIII	Brother of N-6	W
165	B-29	19-1	11-11	.75	M	Sx, L	15	III		W
166	B-30	12-5	9-5	.76	M	D	12	IV		S
167	F-137	13-2	10-1	.76	W	I, Sx	13	IV		W
168	B-31	14-2	10-9	.76	C	B	12	IV		W
169	B-32	14-10	11-4	.76	W	D	14	VIII		L
170	B-33	14-11	11-4	.76	W	B, T	13	VII		W
171	B-34	15-4	11-8	.76	W	S, D	12	V		W
172	F-138	15-5	11-8	.76	W	S, D	14	VIII		W
173	B-35	15-10	12-0	.76	M	T, L, V, S	15	V		W
174	F-139	16-0	12-1	.76	W	B, A, L	15	V		W
175	B-36	18-2	12-1	.76	W	D	18	VIII		G
176	B-37	18-11	12-1	.76	M	Dr, D	16	VI		W
177	B-38	19-2	12-1	.76	W	B, S	14	VI		W
178	B-39	20-11	12-1	.76	W	L, D	16	VI		W
179	B-40	8-0	6-2	.77	W	S	8	I	Bro. D-53, N-17	S
180	B-41	13-2	10-2	.77	W	S, L, T	12	VI		W
181	B-42	13-5	10-5	.77	W	T, V	13	VI		W
182	B-43	13-6	10-5	.77	C	Ar	13	V		W
183	B-44	13-11	10-9	.77	W	S	13	V		W
184	B-45	14-0	10-10	.77	M	D	14	II		W
185	B-46	14-2	11-1	.77	W	S, T	12	IV		W
186	B-47	14-4	11-1	.77	W	I, T	14	V		W
187	B-48	14-6	11-2	.77	W	B, T, S	14	VI		W
188	F-140	14-8	11-4	.77	W	V, Sx, I	14	V		W
189	B-49	14-8	11-4	.77	M	S, I, D	13	V		W
190	B-50	14-11	11-6	.77	W	B	11	VI		W
191	B-51	15-2	11-8	.77	M	B, V, S, T, L	14	VIII		W
192	B-52	15-6	12-0	.77	W	I, S, Dr, D	14	VII		W
193	B-53	15-7	12-0	.77	C	S	12	IV		W
194	B-54	16-11	12-4	.77	W	B, L, T	16	VIII		W
195	B-55	17-0	12-3	.77	W	B, S, I	16	VI		W
196	B-56	17-11	12-5	.77	W	D, F	17	VII		W
197	B-57	18-4	12-3	77	M	B, S, A	16	VI		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
198	B-58	18-7	12-4	.77	W	B, S	18	V		W
199	B-59	19-8	12-4	.77	C	L	18	V		W
200	B-60	19-9	12-3	.77	W	B, S	15	IV		W
201	B-61	19-11	12-4	.77	M	B	17	V		W
202	B-62	11-1	8-8	.78	W	Dr	11	III		W
203	B-63	12-5	9-8	.78	W	S, T	12	II	Brother of N-23	W
204	F-141	13-0	10-1	.78	C	S, D, I	18	IV		W
205	B-64	14-3	11-2	.78	W	B, Sx, T, I	14	V		W
206	B-65	14-7	11-4	.78	W	Sx	14	VII		G
207	B-66	15-1	11-9	.78	M	L, B, T	14	V		W
208	B-67	15-9	12-3	.78	W	Sx, B, T, S	15	VIII		W
209	B-68	15-9	12-4	.78	W	D	15	VI		G
210	B-69	17-6	12-6	.78	W	S, I	15	VIII	Brother of N-31	W
211	B-70	17-8	12-6	.78	W	Ar, T, S	14	V		W
212	B-71	10-0	7-11	.79	M	S, T	10	II		W
213	B-72	12-8	10-1	.79	W	S, I, V, T	12	V		W
214	B-73	12-10	10-2	.79	C	S, D, T	10	IV		W
215	B-74	13-0	10-3	.79	C	L, S, T	10	II		W
216	B-75	13-6	10-8	.79	W	S, T	13	IV		W
217	B-76	14-2	11-2	.79	W	I, V, T	14	VII		W
218	B-77	14-4	11-4	.79	W	B	13	VI		W
219	B-78	14-4	11-4	.79	M	B, S, L	14	IV		W
220	B-79	15-3	12-0	.79	W	I, D, L, S	15	VI		W
221	B-80	17-11	12-8	.79	W	B, L, S, T	16	VIII		W
222	B-81	18-3	12-7	.79	W	Dr, D	17	V		W
223	B-82	19-11	12-8	.79	W	S	18	V		W
224	B-83	20-8	12-7	.79	C	A, T, S, I	15	IV		W
225	B-84	20-9	12-7	.79	W	B, H, S	16	O		W
226	B-85	11-9	9-5	.80	W	D	11	I	Brother of B-10	W
227	B-86	13-10	11-0	.80	W	S	13	IV		L
228	B-87	14-8	11-8	.80	W	V, T	14	VI	Bro. B-18, D-8	W
229	B-88	14-11	12-0	.80	W	B, S	14	V		W
230	B-89	15-2	12-0	.80	W	B	15	VII	Brother of N-60	W
231	B-90	15-2	12-0	.80	W	T	12	IV		W
232	B-91	15-5	12-3	.80	W	Sx	15	VII		W
233	B-92	15-8	12-7	.80	C	F, T, S	15	VII	Step-bro. F-102	W
234	B-93	16-4	12-10	.80	W	B, S, L, T, I	16	V		W
235	B-94	16-7	12-9	.80	W	L, I, B, S	16	X		W
236	B-95	19-5	12-9	.80	W	B	12	VI		W
237	D-1	19-7	12-10	.80	W	L, I	17	VI		W
238	B-96	20-5	12-9	.80	W	S, D	13	VII		W
239	B-97	20-6	12-10	.80	W	I, T, S	15	VII		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
240	B-98	12-11	10-6	.81	W	S, T, I	12	V		W
241	B-99	14-1	11-5	.81	W	D	14	V		G
242	B-100	14-6	11-9	.81	W	F, S	14	IV		W
243	B-101	14-10	12-0	.81	W	L, T, S	14	VI		W
244	B-102	14-11	12-0	.81	W	D	14	VI		
245	B-103	15-1	12-3	.81	C	S, T	15	VII		W
246	D-2	16-0	13-0	.81	W	L, B, S, T	15	VI	2nd cousin N-14	W
247	B-104	16-1	13-0	.81	W	I	16	VIII		G
248	D-3	16-1	13-0	.81	W	Sx, S	14	VI		W
249	D-4	16-9	13-0	.81	W	S, T	16	VII		W
250	B-105	16-7	13-0	.81	C	H, S, B, A	15	V		W
251	B-106	17-8	13-0	.81	W	S, I	16	VIII		W
252	B-107	18-8	13-0	.81	M	B, Sx, S, D	18	III		W
253	B-108	19-2	13-0	.81	C	B, T	14	VI		W
254	B-109	20-5	12-11	.81	C	S, D	15	VI		W
255	B-110	20-7	13-0	.81	M	S	18	IV		W
256	B-111	11-0	9-0	.82	M	D	11	II		S
257	B-112	12-9	10-6	.82	W	B, L, T	12	VI		W
258	B-113	12-10	10-7	.82	W	B	12	V		W
259	B-114	13-11	11-4	.82	W	V, S, T	13	V		W
260	B-115	14-8	12-0	.82	W	B, S, T, D	13	VI		W
261	B-116	14-8	12-0	.82	M	A	13	VI		W
262	B-117	15-7	12-10	.82	M	T	15	V		W
263	D-5	15-10	13-0	.82	W	B, S, I	15	VII		W
264	B-118	16-3	13-1	.82	W	S, I	15	VI		W
265	B-119	16-3	13-2	.82	W	B, T, V, D	15	IV		W
266	B-120	18-0	13-1	.82	C	A	18	VIII		L
267	B-121	18-1	13-1	.82	W	I, D, T	17	VIII		W
268	D-6	18-2	13-2	.82	W	L, T, V, H, S	16	V		W
269	B-122	19-0	13-2	.82	W	Sx, T, S	14	VIII		W
270	B-123	19-1	13-1	.82	W	V, T, D	14	VII		W
271	D-7	20-0	13-1	.82	W	I, T	12	VI		W
272	D-8	9-0	7-6	.83	W	V, T	9	I	Brother B-18, B-87	W
273	D-9	9-8	8-0	.83	W	Sx, L, T, I	9	Ung.		W
274	D-10	10-10	9-0	83	M	B, I, L	10	I		W
275	B-124	12-0	10-0	.83	W	T, I, L, S	13	IV		W
276	D-11	12-6	10-5	.83	W	S	12	III		L
277	B-125	12-10	10-8	.83	W	I	12	III		L
278	B-126	13-10	11-6	.83	C	B, T	13	VIII		W
279	D-12	14-2	11-9	.83	W	S	14	VI		W
280	D-13	14-4	11-10	.83	W	D	14	VII		G
281	D-14	15-2	12-8	.83	M	L	15	VI		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
282	D-15	15-10	13-1	.83	W	B, T, S	12	VI		W
283	D-16	15-11	13-4	.83	W	B, T, S	14	IX		W
284	D-17	16-7	13-3	.83	W	B, I, L	16	VIII		W
285	D-18	18-0	13-3	.83	W	B, H	14	VII		W
286	D-19	19-8	13-4	.83	W	S, D	15	VI		W
287	D-20	12-6	10-6	.84	W	D	12	VII		S
288	D-21	13-7	11-5	.84	W	B, T	11	III		W
289	D-22	14-4	12-1	.84	M	S	11	IV		W
290	D-23	14-7	12-3	.84	W	L	14	V		L
291	D-24	15-5	13-0	.84	M	L, S, I	15	VII		W
292	D-25	15-6	13-0	.84	C	V, I, D	15	VII		W
293	D-26	15-6	13-0	.84	W	I	15	VIII		L
294	B-127	15-6	13-0	.84	C	S	14	VII		W
295	D-27	15-8	13-2	.84	C	L, I, T	15	IX		W
296	D-28	15-9	13-3	.84	W	S	13	V		W
297	D-29	15-10	13-4	.84	W	L, I, B	15	X	Brother of D-36	W
298	D-30	16-3	13-6	.84	W	I, D	16	VIII		G
299	N-1	17-6	13-5	.84	W	S, T, Sx	15	VIII		W
300	D-31	17-6	13-5	.84	W	T, D, I	15	VI		W
301	D-32	18-1	13-6	.84	W	S	15	VI		W
302	D-33	18-9	13-6	.84	C	F, D, H	12	V		W
303	D-34	20-10	13-6	.84	W	B, S	18	VI		W
304	D-35	14-3	12-2	.85	W	L, S, Sx, T, B	14	V		W
305	D-36	14-9	12-7	.85	W	V, I	14	VIII	Brother of D-29	W
306	D-37	15-8	13-4	.85	W	I	15	VII		S
307	D-38	15-11	13-7	.85	W	B	15	VIII		W
308	D-39	16-2	13-7	.85	W	B, T	16	VII		W
309	D-40	17-11	13-7	.85	C	L, S	17	X		W
310	D-41	19-9	13-7	.85	C	Sx, D, S	10	IV	Brother of F-58	W
311	D-42	10-0	8-7	.86	W	S, D, T	9	II		W
312	D-43	10-0	8-7	.86	C	S, D, T	10	III		W
313	B-128	10-3	8-10	.86	W	Sx, T, S	10	II		W
314	D-44	12-6	10-9	.86	W	S	12	III		L
315	D-45	13-2	11-4	.86	W	B, T, S, I, L	11	V		W
316	N-2	13-9	11-9	.86	W	Sx, D	13	III		W
317	D-46	14-1	12-1	.86	W	Sx, T, B, S	13	V	Brother of D-76	W
318	D-47	16-6	13-9	.86	W	L, S, T	14	VIII		W
319	D-48	16-8	13-9	.86	W	B, V	16	VII		W
320	D-49	18-7	13-8	.86	M	B, D, T, S	12	VI		W
321	D-50	18-9	13-9	.86	W	L, S	16	VII		W
322	D-51	20-3	13-9	.86	W	Dr, L, H, V	18	VI		W
323	D-52	9-0	7-10	.87	C	T, I	9	III		L

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
324	D-53	10-0	8-8	.87	W	D	10	III	Bro. B-40, N-17	W
325	D-54	11-0	10-3	.87	W	S, T	11	IV		W
326	D-55	12-5	10-9	.87	W	S, L	12	IV		L
327	N-3	13-10	12-0	.87	W	V, S, T, D	13	VI		W
328	D-56	14-4	12-5	.87	M	B, S, T	13	VI		W
329	D-57	14-5	12-6	.87	W	I, Sx	14	VII		W
330	D-58	15-0	13-0	.87	C	T, I, S, L	15	VI		W
331	D-59	15-1	13-2	.87	C	L, S, T	10	IV		W
332	D-60	15-6	13-5	.87	W	Sx, F	15	VII		W
333	D-61	15-11	13-9	.87	W	S, T	15	VIII		G
334	D-62	16-8	13-11	.87	W	L, S, T	16	VII		W
335	D-63	17-5	13-11	.87	W	Sx, L	14	V		W
336	D-64	17-7	13-10	.87	W	L, B, T	17	VIII		W
337	N-4	19-3	13-11	.87	W	H	18	VII		W
338	D-65	12-7	11-1	.88	W	S, T, I	12	V		W
339	D-66	13-0	11-6	.88	W	I	13	V		W
340	D-67	14-0	12-4	.88	W	S, Sx, I, B, T	13	V		W
341	D-68	14-1	12-5	.88	W	B, I, S	13	VII		W
342	D-69	14-11	13-2	.88	W	S, I	14	VI		W
343	D-70	15-5	13-6	.88	W	S, T, I	14	VIII	Brother N-48	W
344	D-71	15-5	13-7	.88	W	I, D, T	15	VII		W
345	D-72	15-8	13-9	.88	W	Sx, D	14	VI		W
346	D-73	16-3	14-1	.88	W	I, Sx	15	VIII		W
347	D-74	18-4	14-1	.88	W	B, S, T, Sx, I	15	VIII		W
348	D-75	8-7	7-8	.89	W	S	8	III		W
349	D-76	9-2	8-2	.89	W	D	9	III	Brother D-46	L
350	D-77	13-2	11-9	.89	W	I	8	IV		W
351	D-78	14-3	12-8	.89	W	L, B, S, I	14	VIII	Brother N-57	W
352	N-5	14-7	13-0	.89	W	B, S, I	14	VIII		W
353	D-79	15-9	14-1	.89	W	I	9	V		W
354	D-80	16-3	14-2	.89	W	S	16	VIII		G
355	D-81	17-10	14-3	.89	W	Sx, T, L	16	VII		W
356	D-82	19-1	14-3	.89	W	B, T, S, D	14	V		W
357	D-83	20-6	14-2	.89	W	B, S	17	VIII		W
358	D-84	20-10	14-2	.89	W	B, D, L	17	VII		W
359	D-85	12-4	11-1	.90	M	I	12	V		W
360	D-86	12-10	11-7	.90	W	B, D, S, I	12	IV		W
361	D-87	15-3	13-8	.90	C	B, S, L, T	15	VII		W
362	D-88	15-6	13-11	.90	W	F, S, T, B, I	15	VII		W
363	D-89	15-7	14-0	.90	W	S, T	12	V		W
364	D-90	19-8	14-5	.90	W	V, D	19	VII		W
365	D-91	9-5	8-7	.91	C	B, T	9	I		W
366	D-92	12-2	11-1	.91	W	S	12	IV		S
367	N-6	13-5	12-2	.91	M	S, T, V	14	V	Brother B-28	W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst.
368	N-7	14-3	13-0	.91	W	L, B, H	13	VI		W
369	D-93	15-0	13-8	.91	W	T, B, S	14	VII		W
370	D-94	19-5	14-6	.91	W	L, T, I, S	16	VIII		W
371	D-95	20-7	14-6	.91	W	S	17	VIII		W
372	N-8	20-11	14-6	.91	W	B, S, D	19	VII		W
373	N-9	9-3	8-6	.92	W	T, I	9	III		L
374	N-10	13-3	12-2	.92	W	I, A, T, Sx	13	VI	Cousin F-121	W
375	N-11	14-10	13-7	.92	W	S	14	VII		W
376	N-12	15-8	14-5	.92	W	I, T	15	IX		W
377	N-13	16-4	14-8	.92	W	S, B, T	15	VII		W
378	D-96	19-3	14-8	.92	W	S	15	VIII		W
379	N-14	11-12	10-5	.93	W	I, T	11	IV	2nd cousin D-2	W
380	D-97	14-8	13-8	.93	C	L, D, T, I	11	III		W
381	N-15	16-3	14-9	.93	W	B	15	IX		W
382	N-16	20-9	14-11	.93	W	B, S, I, Dr	14	VII		W
383	N-17	6-0	5-8	.94	W	D	6	I	Brother B-40, D-53	S
384	N-18	10-11	10-3	.94	W	S, D	10	IV		W
385	N-19	11-2	10-6	.94	W	S, T, I	12	IV		W
386	N-20	12-10	12-1	.94	W	B	12	IV		W
387	N-21	13-0	12-3	.94	W	T, I	12	V		W
388	N-22	13-8	12-10	.94	W	S, I	13	VIII		W
389	N-23	14-1	13-3	.94	W	S, D, I	9	I	Brother of B-63	W
390	N-24	15-8	14-9	.94	W	T, I	15	IX		W
391	N-25	16-3	15-0	.94	W	V, I, S	13	VII		W
392	N-26	18-5	14-11	.94	M	B, L	15	VII		W
393	N-27	19-2	14-11	.94	W	B, S	18	VIII		W
394	N-28	20-0	15-1	.94	W	Sx, D	17	V		W
395	N-29	13-5	12-9	.95	W	S	9	III		W
396	N-30	14-3	13-7	.95	W	V, Sx, D, I	14	VII		W
397	N-31	15-0	14-3	.95	W	T	12	VI	Brother of B-69	W
398	N-32	16-0	15-3	.95	W	D	14	V		W
399	N-33	11-1	10-7	.96	W	I	11	V		W
400	N-34	13-1	12-7	.96	W	A	13	Ung.		L
401	N-35	13-8	13-2	.96	W	B, D, S, I	13	VII		W
402	N-36	14-6	14-0	.96	W	S, T	14	VIII		W
403	N-37	14-7	14-1	.96	W	I, V	14	VII		W
404	N-38	14-11	14-4	.96	W	F, S	14	VIII		W
405	N-39	18-8	15-4	.96	W	B, T, S	12	VI		W
406	N-40	20-11	15-3	.96	M	S	17	IV		W
407	N-41	10-5	10-2	.97	W	I, T, D, Ar	10	I		W
408	N-42	12-3	11-10	.97	W	T, V	12	V		L
409	N-43	13-6	13-1	.97	W	I, B, S	13	Ung.		W

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst
410	N-44	14-8	14-3	.97	W	S, T	14	V		W
411	N-45	14-8	14-3	.97	W	L, S, T, B	13	VIII		W
412	N-46	16-7	15-6	.97	W	L, I	16	VIII		L
413	N-47	18-0	15-8	.97	W	Sx	17	X		W
414	N-48	11-10	11-7	.98	W	S	11	V	Brother of D-70	W
415	N-49	17-11	15-7	.98	W	Sx, S	14	VIII		W
416	N-50	9-8	9-7	.99	W	S, T, I	9	IV		W
417	N-51	12-2	12-0	.99	W	T	12	V		L
418	N-52	12-11	12-9	.99	W	S, T	12	VII		W
419	N-53	14-4	14-3	.99	C	B, L, V	14	VI		W
420	N-54	14-5	14-3	.99	C	S, T, I	14	VIII		W
421	N-55	15-9	15-6	.99	W	Sx, I, V, T	15	VIII		W
422	N-56	18-11	15-10	.99	C	B, S, I, T, L	18	VIII		W
423	N-57	20-0	15-9	.99	W	L, B, T	14	IX	Brother of D-78	W
424	N-58	13-3	13-3	1.00	W	A	13	V		L
425	N-59	13-4	13-4	1.00	W	L, T, S, I	13	V		W
426	N-60	14-9	14-9	1.00	W	B, L, T	14	VIII	Brother of B-89	W
427	N-61	15-4	15-4	1.00	W	S	15	IX		L
428	N-62	15-6	15-6	1.00	W	L, T, I	15	VIII		W
429	N-63	18-7	16-0	1.00	W	B, D	17	VIII		W
430	N-64	18-10	16-0	1.00	W	F	16	VII		W
431	N-65	19-1	16-0	1.00	W	S	19	VI		W
432	N-66	19-4	16-0	1.00	C	V, D, S, I	14	VII		W
433	N-67	10-9	10-10	1.01	C	S, I, T	10	IV		W
434	N-68	13-6	13-7	1.01	W	S, T	13	VII		W
435	N-69	20-6	16-1	1.01	W	V, D, T	18	VII		W
436	N-70	14-4	14-8	1.02	W	F, L, B, T, S	12	VII		W
437	N-71	14-5	14-9	1.02	W	Sx	14	VI		W
438	N-72	15-7	15-10	1.02	W	L, S, B, T, I	14	IX		W
439	N-73	15-9	16-1	1.02	W	S	15	VIII		G
440	N-74	18-1	16-4	1.02	W	F	17	VIII		W
441	N-75	15-1	15-7	1.03	W	S	15	VIII		G
442	N-76	18-9	16-6	1.03	W	H, L, Sx	16	VI		W
443	N-77	10-10	11-3	1.04	W	S	10	IV		L
444	N-78	13-11	14-5	1.04	W	V, I, S, T	13	VII		W
445	N-79	15-10	16-5	1.04	W	B, S	15	IX		W
446	N-80	16-0	16-8	1.04	W	B, D	15	VIII		W
447	N-81	16-2	16-7	1.04	W	L,I,Sx,Dr,T,S	15	VIII		W
448	N-82	16-7	16-7	1.04	W	B, S	15	VII		W
449	N-83	19-6	16-8	1.04	W	S	19	X		G
450	N-84	11-5	12-0	1.05	W	B, L, V, T, I	11	VI		W
451	N-85	16-7	16-10	1.05	W	S	16	VI		G

No.	Case	Age	M.A.	I.Q.	Race	Offenses	Comm.	Grade	Relation to Others	Inst
452	N-86	16-10	16-9	1.05	W	B, S	16	VIII		W
453	S-1	20-1	17-0	1.06	W	S, F, H, I	10	VII		W
454	N-87	11-0	11-9	1.07	W	S	11	VI		S
455	N-88	16-0	17-1	1.07	W	B, S, L	15	IX		W
456	S-2	16-8	17-2	1.07	W	L, I	16	IX		W
457	N-89	20-4	17-1	1.07	W	B, F	17	X		W
458	S-3	8-9	9-6	1.08	W	L, T, I, S	8	III		W
459	N-90	20-10	17-3	1.08	W	Sx, B, D	10	VIII		W
460	S-4	10-2	11-2	1.10	W	D, Sx, I	10	V		W
461	S-5	17-11	17-9	1.10	W	L, B	17	VI		W
462	S-6	19-4	17-7	1.10	W	L	18	X		W
463	S-7	21-6	17-8	1.11	W	H, F, S, Sx	17	X		W
464	S-8	7-0	8-0	1.14	M	S	7	I		L
465	S-9	16-3	18-3	1.14	W	L	16	IX		W
466	S-10	11-11	13-9	1.15	W	A, S, I	11	VII		W
467	S-11	11-0	12-9	1.16	W	B, T	11	IV		W
468	S-12	14-0	16-6	1.18	W	S, T, I	13	VIII		W
469	S-13	13-7	16-7	1.22	W	Dr, B, S	13	VII		W
470	S-14	13-9	18-6	1.35	W	T	13	X		S

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